NASDAQ OMX

May 20, 2014

Ms. Elizabeth M. Murphy
Secretary
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-1090

Re: ***File No. SR-Phlx-2013-113—Statement of Dr. Parker M. Normann***

Dear Ms. Murphy:

NASDAQ OMX PHLX LLC ("Phlx") respectfully submits this response to the statement of Dr. Parker M. Normann, filed May 8, 2014. Dr. Normann's statement provides no basis for disapproving the Proposal. In particular, Dr. Normann does not address the central issues before the Commission; he does not express an opinion as to whether the Proposal would harm competition, constitute unfair price discrimination, or violate the Exchange Act for any other reason. In fact, Dr. Normann does not offer an opinion that the Proposal will be harmful in any way.

Dr. Normann offers no opinion that consumers or competition would be harmed by this proposed price reduction. This is no accidental omission. As an economist, Dr. Normann surely knows that—consistent with universally accepted economic principles—consumers will benefit from the enhanced competition that will result from approval of the Proposal, as they have benefitted by the competition that drove Phlx to file the Proposal.

Instead of pointing to any harm to competition or market participants that might plausibly flow from increased price competition free from undue regulatory interference, Dr. Normann contends merely that he would "expect a [more] fulsome efficiency discussion."[1] But Dr. Normann's criticism of Phlx's efficiency discussion appears to be based on the misguided assumption that differential pricing is only justified where it results in "efficiencies related to the customer or transaction."[2] Dr. Normann is correct to note that differential pricing might result in such efficiencies (as in Dr. Normann's example, where a manufacturer might save on shipping costs by selling to a higher volume customer). That type of cost savings, however, is not the only pro-competitive justification for differential pricing. To the contrary, Dr. Normann himself

[1] Statement of Dr. Parker M. Normann, File No. SR-Phlx-2013-113 (May 8, 2014).

[2] *Id.* at 6, 7.

cites authoritative economic literature that explains—as Dr. Normann acknowledges—that "an economic justification for quantity discounting can be based on factors such as high fixed costs."[3] Specifically, courts and commentators agree that differential pricing often benefits consumers—and is perfectly consistent with healthy competition—when it allows firms to recover significant sunk or common costs.[4] In these circumstances, the efficiencies of the differential pricing do not result from "efficiencies related to the customer or transaction," but instead from spreading large fixed costs across a larger volume. And, as Drs. Willig and Bamberger explain in the attached statement, the Proposal allows Phlx to obtain more trading volume and spread its substantial fixed and common costs over more trades, which helps it cover its fixed and common costs and benefits market participants.[5] Accordingly, under the well-accepted economic authorities that Dr. Normann himself cites (but never fully addresses), the Proposal should be approved.

Dr. Normann also ignores the other substantial benefits that would result from the Proposal. The Proposal will provide customers with a modest discount, which will encourage market participants to direct liquidity to the Exchange, resulting in tighter spreads, increased trading opportunities, and a better functioning trading platform.[6] The Proposal could also force competitors to respond with price cuts of their own, which would further benefit market participants.[7] It also provides participants with "greater flexibility in making routing decisions," which "allows members to better fulfill their duties to customers."[8] And it allows Phlx to offer a pro-competitive volume discount without creating an undue incentive for members to shift volume to Phlx from an affiliated exchange (a problem not faced by single-exchange operators).[9]

In any event, Dr. Normann does not even attempt to argue that the Proposal will be anti-competitive. He does not contend that the Proposal will exclude rivals. Nor does he argue that any such exclusion of rivals would harm competition. Absent such a claim (which none of the commentators has made), any argument that the Proposal is anti-competitive must fail.[10]

Dr. Normann also does not contend that the Proposal would constitute unfair discrimination under the Exchange Act. Nor can there be any argument that the Proposal is unfairly discriminatory because it is an efficiency-based volume discount—as described in the

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[3] *Id.* at 7 (citing William J. Baumol & Daniel Swanson, *The New Economy and Ubiquitous Competitive Price Discrimination*, 70 Antitrust L.J. 661 (2003)).

[4] *See, e.g.*, *Ill. Toolworks Inc. v. Indep. Ink, Inc.*, 547 U.S. 27, 44-45 (2006); *United States v. Am. Express Co.*, 10-cv-4496, 2014 U.S. Dist. LEXIS 63169, at *40 (E.D.N.Y. May 7, 2014); Baumol & Swanson, *supra*.

[5] Drs. Willig and Bamberger also explained this aspect of the Proposal in their previous submission. *See* Statement of Robert Willig & Gustavo Bamberger, at 15-18 (Jan. 24, 2014).

[6] *See, e.g.*, Phlx Response Letter, at 2 (Jan. 24, 2014).

[7] *See, e.g.*, *id.*

[8] *See* Citadel Comment, at 2 (Dec. 18, 2013).

[9] *See, e.g.*, Phlx Response Letter, at 6, 9 (Apr. 18, 2014).

[10] *See, e.g.*, *Schor v. Abbot Labs.*, 457 F.3d 608, 610-11 (7th Cir. 2006) (Easterbrook, J.) (price discrimination creates "no antitrust worry" when there is no prospect of exclusion of rivals); Phlx Response Letter, at 9 & n.27 (Jan. 24, 2014) (collecting cases); *see also* IIIA Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law*, at 345-46 & n.127 (3d ed. 2008) (using bundling to price discriminate is generally pro-competitive).

accompanying statement—or because it does not meet Dr. Normann's unsupported "efficienc[y] related to the customer or transaction" standard. The Commission has previously approved several similar forms of efficiency-based volume discounts that price discriminate (and that might arguably be characterized as not creating "efficiencies related to the customer or transaction"), including cross-SRO pricing on equities exchanges,[11] discounted fees for proprietary trading products linked to volume in multiply-listed products,[12] fee caps and enterprise licenses that favor heavy users of a system over other users,[13] and differentiated pricing for data fees.[14] Those forms of differentiated pricing are not unfairly discriminatory. Neither is the Proposal.

In sum, after nearly six months of public scrutiny, the record is replete with evidence that the Proposal is consistent with the Exchange Act, and devoid of credible evidence to the contrary. In response to the Commission's repeated requests for information, only one customer (Citadel) has commented—and it supports the Proposal.[15] Phlx's rivals have submitted ineffectual and unsubstantiated oppositions that demonstrate only that they would like regulatory intervention to protect them from having to compete with the price cut inherent in the Proposal, but they fail utterly to explain why the Proposal would harm competition or investors. As the Commission has recognized, "[i]t is important that the Commission avoid stifling competition on the merits—including competition on price—out of a concern for protecting competitors from pricing pressure."[16] For that reason—and the many others set forth in Phlx's prior submissions—Phlx respectfully submits that the Proposal should be approved.

Sincerely,

Joan C. Conley

Joan Conley

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[11] Exchange Act Release No. 34-50787 (Dec. 2, 2004).

[12] CBOE Regulatory Circular RG13-158 (Dec. 13, 2013).

[13] *See, e.g.*, Exchange Act Release No. 34-70045 (July 26, 2013).

[14] *See, e.g.*, Exchange Act Release No. 34-7068 (Oct. 15, 2013).

[15] *See* Citadel Comment, at 2 (Dec. 18, 2013).

[16] Exchange Act Release No. 34-62001 (Apr. 29, 2010).

Reply Statement of Robert Willig and Gustavo Bamberger

I. INTRODUCTION.

1. We previously filed a statement in this matter. Our experience and credentials are summarized in our prior statement.

2. We have been asked by counsel for The NASDAQ OMX Group, Inc. ("NASDAQ") to review and evaluate the statement of Dr. Parker M. Normann ("Normann Statement") filed on behalf of the Chicago Board Options Exchange, Inc., International Securities Exchange, LLC, and Miami International Securities Exchange, LLC. Dr. Normann reviews the proposal by NASDAQ OMX PHLX LLC ("Phlx") to amend the "Customer Rebate Program" offered by Phlx to customers trading multiply listed equity options on Phlx, and reaches three conclusions. As we explain in this reply statement, Dr. Normann's second conclusion is incorrect as a matter of economics. We explain and discuss Dr. Normann's error in this reply statement.

3. Currently, Phlx customers can earn rebates on certain trades by reaching certain volume thresholds during a month. Under the terms of the current Customer Rebate Program, a customer's volume for the purpose of meeting rebate thresholds depends only on its trading volume on Phlx. Under the terms of its proposed amendment, Phlx would increase its rebate by $0.02 per contract for customers achieving the highest rebate level. For the purpose of determining a customer's monthly trading volume, Phlx proposes to determine a customer's share of national customer volume for the month by aggregating the trading volume of a customer and all its affiliates on Phlx and two other equity options exchanges owned by NASDAQ – NASDAQ Options Market ("NOM") and NASDAQ OMX BX Options ("BX"). A customer would earn the additional rebate only on eligible trades on Phlx. That is, trades on NOM and BX could be used to meet the threshold for the additional rebate on Phlx trades, but NOM and BX trades would not receive the additional rebate.

4. Dr. Normann's first conclusion – that "the proposed Phlx rule change is likely a form of price discrimination"[1] – is not controversial. Indeed, in our prior statement, we explained that Phlx's proposed pricing is a type of pricing structure that "economists call . . . 'differential pricing' or 'price discrimination.'" We also explained that "[t]here is nothing problematic with such pricing once it is realized that in the face of high fixed and common costs, neither marginal-cost pricing nor uniform pricing are desirable from efficiency principles."[2]

5. Dr. Normann's third conclusion – that "the effect of the proposed Phlx rule change likely would be to pay rebates to Phlx customers based on purchases made at other exchanges"[3] – is just an immediate logical implication of the structure of the proposed pricing amendment. That is, if customers meet the threshold for the additional rebate by combining volume on Phlx, NOM and BX, then the additional rebate – paid only on trades on Phlx – would be based, in part, on purchases on NOM and/or BX.

6. Dr. Normann's second conclusion, however, is wrong as a matter of economics. Dr. Normann concludes that "the proposed Phlx rule change does not appear to be an efficiency-based volume discount."[4] Dr. Normann's mistaken conclusion is based on an incorrect understanding of efficiency-based discounts.

7. Dr. Normann begins his analysis with a discussion of volume discounts, and states that many volume discounts are "based on costs and efficiencies related to the customer or transaction."[5] Dr. Normann then states that the Phlx proposal is not based on such cost efficiencies (i.e., efficiencies related to a customer or transaction).[6] Dr. Normann concludes that

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1. Normann Statement, p. 9.
2. Statement of Robert Willig and Gustavo Bamberger, ¶ 29.
3. Normann Statement, p. 9.
4. Normann Statement, p. 9.
5. Normann Statement, ¶ 12.
6. See Normann Statement, ¶¶ 14 – 15.

"[t]he structure for the proposed rule change does not appear to meet the characteristics of an efficiency-based quantity discounting program."[7]

8. Dr. Normann is wrong to claim that volume-based cost savings are the only source of efficiency-based discounts. Dr. Normann's error appears to be based on a misreading of an article by William J. Baumol and Daniel G. Swanson ("Baumol and Swanson").[8] In particular, Dr. Normann cites Baumol and Swanson for the proposition that "'it is competition, rather than its absence, that in many cases serves to impose discriminatory pricing.' In particular, high fixed costs and relatively low marginal costs (as is found with trading on options exchanges) may give rise to efficiency-based quantity discounts."[9] Dr. Normann concludes that "such efficiency-based volume discounting is based on efficiencies related to the customer or transaction."[10]

9. Dr. Normann is wrong. Baumol and Swanson do <u>not</u> rely on customer- or transaction-specific cost savings to reach their conclusion that volume-based rebates can be efficient. Instead, Baumol and Swanson show that in industries with fixed, sunk and common costs, in which marginal cost pricing is not feasible, volume-based discounts are efficient because they encourage more utilization of the fixed, sunk and common costs. That is, volume-based discounts, by reducing the difference between price and marginal cost, particularly on incremental volume that might not otherwise utilize the services of the exchanges, increase the utilization of assets by eliminating part of the (unavoidable) inefficiency that arises from having to charge prices above marginal cost.

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7. Normann Statement, ¶ 14.
8. See William J. Baumol and Daniel Swanson, "The New Economy and Ubiquitous *Competitive* Price Discrimination: Identifying Defensible Criteria of Market Power," *Antitrust Law Journal*, Vol. 70, 2003, pp. 661 – 685. Baumol and Swanson explain that "[m]uch of the formal analysis underlying this paper is based on William J. Baumol, John C. Panzar & Robert D. Willig, *Contestable Markets And The Theory Of Industrial Structure* (rev. ed. 1988)."
9. Normann Statement, ¶ 13 (citations to Baumol and Swanson omitted).
10. Normann Statement, ¶ 13.

10. We understand that the three NASDAQ options exchanges share substantial fixed, sunk costs. There is no meaningful way to allocate such common costs across the three exchanges. Thus, revenue collected from trades on any of the three exchanges (for which the net price is higher than marginal cost) contributes to covering the fixed, sunk and common costs of all three exchanges.

11. Phlx's proposed rebate encourages more efficient utilization of the services of Phlx, NOM and BX by linking the availability of the rebates on Phlx to a customer's total use of their services. This is a Pareto efficient (win-win) form of pricing[11] because while delivering more rebates to more customers, it also can on net help to recover the fixed, sunk and common costs of the exchanges inasmuch as it builds volume across NASDAQ's exchanges sufficiently to offset the cost of the added rebates. Contrary to Dr. Normann's second conclusion, Phlx's proposed pricing is an efficiency-based volume discount.

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May 20, 2014

11. The basic economic theory for this proposition is established in Robert Willig, "Pareto Superior Nonlinear Outlay Schedules," *Bell Journal of Economics*, Vol. 9, No. 1, Spring 1978, pp. 56 – 69.