

1 HOUSE OF REPRESENTATIVES  
2 COMMONWEALTH OF PENNSYLVANIA

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4 House Resolution 701 (PSERS & SERS)

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6 House State Government Committee

7 Main Capitol Building  
8 Room 60 East Wing  
9 Harrisburg, Pennsylvania

10 Tuesday, April 1, 2014 - 9:00 a.m.

11 --oOo--

12 COMMITTEE MEMBERS PRESENT:

13 Honorable Daryl Metcalfe, Majority Chairman  
14 Honorable George Dunbar  
15 Honorable Eli Evankovich  
16 Honorable Garth Everett  
17 Honorable Matt Gabler  
18 Honorable Fred Keller  
19 Honorable Jerry Knowles  
20 Honorable Tim Krieger  
21 Honorable David Maloney  
22 Honorable John McGinnis  
23 Honorable Brad Roae  
24 Honorable Rick Saccone  
25 Honorable Mark Cohen, Minority Chairman  
Honorable Mary Jo Daley  
Honorable Marty Flynn  
Honorable Jordan Harris  
Honorable Dan Miller  
Honorable Brian Sims

NON-COMMITTEE MEMBERS:

Honorable Mark Mustio

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STAFF MEMBERS PRESENT:

Bonnie Book  
Majority Legislative Administrative Assistant

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SUBMITTED WRITTEN TESTIMONY

(See other submitted testimony and handouts  
online.)

1 MAJORITY CHAIRMAN METCALFE: Good  
2 morning. This hearing of the House State  
3 Government Committee is called to order.

4 Before we take the roll, if I could ask  
5 everyone to please rise and would ask  
6 Representative Miller -- Representative Miller,  
7 would you be willing to lead us in the pledge this  
8 morning, sir?

9 (Pledge of Allegiance).

10 MAJORITY CHAIRMAN METCALFE: Thank you,  
11 Representative Miller.

12 If I could ask my assistant, Bonnie, to  
13 call the roll, please.

14 (Roll call held off the record).

15 MAJORITY CHAIRMAN METCALFE: Thank you,  
16 Bonnie.

17 Our hearing today is on House Resolution  
18 701, a resolution that's been sponsored by  
19 Representative Mustio, who is with us this morning.  
20 Representative Mustio is going to open up with some  
21 opening remarks on his resolution. Then we'd  
22 invite Representative Mustio to sit with the  
23 committee for the testimony and participate in the  
24 Q and A session with the board of testifiers, if  
25 you'd like to.

1                   Mark, we're ready for you to begin when  
2 you're ready.

3                   REPRESENTATIVE MUSTIO: Chairman  
4 Metcalfe and Chairman Cohen, thank you very much  
5 for holding this hearing on this resolution, as  
6 well as the members of the committee.

7                   How did we get here today? Quite  
8 honestly, during the appropriations hearings, I was  
9 on that committee and I ran into a lobbyist, and I  
10 asked the lobbyist what issues he was working on.  
11 He brought the issue of a particular client to me,  
12 and I thought what they did was rather intriguing  
13 and interesting.

14                   So, at the appropriations hearings when  
15 PSERS and SERS were in front of us, I asked a  
16 couple of questions to determine whether or not  
17 this new technology was being used or if they knew  
18 about it. And it appeared to me at that time that  
19 they did not, so the resolution's intent is to  
20 bring some sunshine on an issue.

21                   I'm not advocating for the company,  
22 their product or any other company that may do  
23 similar work. But I think it's an issue that we,  
24 as fiduciaries, in our responsibility of the  
25 taxpayers' dollars is something we should bring

1 some light to.

2 I sent out a co-sponsorship memo  
3 recognizing the hard work and dedicated employees  
4 at PSERS and SERS and the great job that they've  
5 done for our retirement systems, and the evidence  
6 supporting that is substantial. However, the  
7 intent of this resolution is to motivate both  
8 systems to reach out to firms that provide the  
9 service to recover these funds.

10 Now, I would like to share with you,  
11 before we receive testimony, an e-mail I received  
12 from PSERS. I think it in some ways raises some of  
13 the concerns and some of the questions that may be  
14 in our minds as we look at this process.

15 It says: This communication is an  
16 expression of our concern in discussing a  
17 single-business firm, Securrex, and its  
18 capabilities in a public forum. I've attempted to  
19 arrange, through your capitol office staff, a phone  
20 discussion with you on this issue since Tuesday of  
21 last week. Having failed in that attempt, I  
22 believe that the matter is of such importance I  
23 decided to contact you directly through e-mail.

24 In researching the services offered by  
25 Securrex, PSERS has obtained very unsettling

1 responses from experts in the investment industry  
2 regarding both the company and their proposed  
3 services. One PSERS' consultant, an expert in  
4 trading (sic) cost analysis, shared with PSERS a  
5 position paper that the firm had prepared on  
6 Securrex. It portrays the claims of Securrex as  
7 dubious, and the analysis trends from skeptical to  
8 highly critical.

9 Further research has revealed the use  
10 of exceptionally aggressive marketing tactics by  
11 Securrex towards public pension funds in other  
12 states. These include approaching state-elected  
13 officials to apply political pressure on their  
14 respective state's public pension system when the  
15 system administrators were not receptive to  
16 engaging the services of Securrex.

17 In preparation for the April 1st public  
18 hearing, the Pennsylvania State Employees'  
19 Retirement System, SERS, tried to arrange a  
20 conference call with Securrex to discuss the  
21 services offered and capabilities of the company.  
22 Securrex demanded that SERS sign a non-disclosure  
23 agreement just to discuss these matters on the  
24 phone with agency staff.

25 These are poor indicators that Securrex

1 is dealing in good faith or will be forthcoming and  
2 transparent in a public forum before the House  
3 State Government Committee. PSERS is not adverse  
4 to continuing its due diligence in researching and  
5 exploring the issues raised relative to compliance  
6 with the National Best Bid and Offer and sharing  
7 them with members of the General Assembly.

8 National Best Bid and Offer does, however, involve  
9 a highly sophisticated operation and  
10 monitoring stock transactions.

11 PSERS is not confident that the NBBO  
12 issue or the claims and capabilities of Securrex  
13 can fully be explained or verified prior to the  
14 scheduled public hearing. PSERS would prefer  
15 additional time to establish facts where we now  
16 have unsubstantiated claims developed as part of a  
17 marketing campaign. I believe that a postponement  
18 of the public hearing will allow more time to  
19 factually dispel doubts and assure that the best  
20 execution of trades is being attained by PSERS.

21 Change is sometimes difficult. I think,  
22 as I said in my earlier remarks, it's important  
23 that we look at technology. Technology is changing  
24 fast, and the markets are using technology to their  
25 advantage. And sometimes that advantage, it



1 appears, based on a 60 Minutes report on Sunday,  
2 may be to the disadvantage of stockholders.

3 So, that was kind of giving you a  
4 background on the atmosphere that this is taking  
5 place. But I thank you, Mr. Chairman, for your  
6 time.

7 MAJORITY CHAIRMAN METCALFE: Thank you.  
8 Representative Mustio, as I said, you're welcome to  
9 join the committee members for the Q and A for our  
10 testifiers.

11 We'd now like to invite Mr. John Marks,  
12 Managing Director of Securrex Services, LLC from  
13 Deerfield, Illinois. Mr. Marks, you can begin when  
14 you're ready, sir.

15 MR. MARKS: Good morning, and thank you,  
16 Chairman Metcalfe, very much for the invitation to  
17 speak and present new data and new solutions on  
18 recovering money for the pension systems of  
19 Pennsylvania. I also thank you, Representative  
20 Mustio, for being the prime sponsor of Resolution  
21 701 that affects --

22 MAJORITY CHAIRMAN METCALFE: Excuse me  
23 for a minute, sir. Staff really need to pay  
24 attention to our testifiers, and I shouldn't be  
25 interrupted by staff conversations during this

1 testimony. So, if staff could be seen and not  
2 heard at this time, it would be appreciated. Thank  
3 you.

4 You can continue, sir.

5 MR. MARKS: Thank you.

6 Again, I'd like to thank Representative  
7 Mustio for being the prime sponsor for Resolution  
8 701 that affects so many families in a very  
9 material way.

10 My name is John Marks, and I'm the  
11 managing director of Securrex, based in the  
12 northern suburbs of Chicago. My background is  
13 almost 30 years in technology and, specifically,  
14 hardware and software. My most well-known  
15 professional accomplishment is being one of the co-  
16 founders of Fortune 500 direct marketing powerhouse  
17 CDW. For those of you who watch golf on  
18 television, the leaderboard is powered by CDW, and  
19 former great 76ers Charles Barkley is featured in  
20 many of their commercials.

21 I started Securrex as a market watchdog  
22 organization after I was made aware of the massive  
23 scale of fraud plaguing our financial markets and  
24 observing the interactions of our regulatory  
25 authorities when these frauds were reported.

1 Investors are being ripped off every day and don't  
2 stand a chance of recovering without independent  
3 forensic evidence proving harm.

4           Securrex is a whistle-blowing  
5 organization bringing original information and  
6 technology to organizations we believe are being  
7 materially harmed. The evidence and information we  
8 provide is through independent analysis and not  
9 generally known or available to the public for  
10 which we are the sole and original source. Our  
11 repository is the result of really smart financial  
12 quants with the ability to take raw data and  
13 writing algorithms to give easily-readable, usable  
14 reports.

15           We are here to help and, as  
16 whistleblowers, we typically receive a bounty on  
17 recovery and indemnification from clients that we  
18 engage with. Securrex forensically uncovers trade-  
19 through violations of the Order Protection Rule 611  
20 of Regulation NMS.

21           A trade-through is defined as, and I  
22 quote: A trade that has not been executed at the  
23 best possible price according to quoted price at  
24 other exchanges. Passed in 2007, Rule 611,  
25 otherwise known as the Order Protection Rule, aims

1 to ensure that both institutional and retail  
2 investors get the best possible price for a given  
3 trade by comparing quotes on multiple exchanges.  
4 If a better price is quoted elsewhere, the trade  
5 must be routed there for execution and not traded  
6 through at its current exchange, end quote.

7           The SEC Order Protection Rule gives  
8 broker-dealers a one-second flickering quotation  
9 exemption to fill stock trades at any price equal  
10 to or better than the worst best bid or best offer  
11 of the preceding second.

12           In short, unless each trade execution is  
13 examined against the NBBO data of all market  
14 centers, you will not know if there has been a  
15 trade-through violation.

16           During the budget committee meeting last  
17 month, Representative Mustio asked the fiduciaries  
18 of SERS and PSERS some questions pertaining to  
19 trade-through violated trades. In the YouTube  
20 video, PSERS identified Zeno Consulting and SERS  
21 identified Abel Noser as the firms they engage with  
22 with best execution analysis. While the question  
23 was specifically to trade-through analysis and not  
24 best execution services, it was no surprise hearing  
25 their answers.

1           While both firms are highly respected,  
2           neither firm has the forensic capability or  
3           granular data to perform a true trade-through  
4           audit, which was the question. Representative  
5           Mustio then asked, has Abel Noser or Zeno  
6           identified any trade-through violations, the answer  
7           was no or none that I know of.

8           In truth, ladies and gentlemen, there  
9           are millions of dollars of investor harm every  
10          market day directly in trade-through and many other  
11          violated trades that belong to the State of  
12          Pennsylvania.

13          Today, trade-through audits are not part  
14          of the best execution regulatory compliance  
15          programs, but they should be because it's an  
16          invisible area to every public and private fund,  
17          but this problem can now be solved.

18          But we are not here to embarrass  
19          anybody. We are here to help solve a problem. The  
20          current managers of the Pennsylvania pension system  
21          should commended for embracing progressive measures  
22          that technology affords. In truth, Securrex has  
23          not been around long enough to inform states that  
24          their current best execution compliance programs  
25          need to be updated to include trade-through audits

1 and recovery.

2 Our solutions are very new to a problem  
3 that is very old. It is only recent that Securrex  
4 has started opening up our repository to assist  
5 pension funds like SERS and PSERS. Our past work  
6 has been with trading firms who engage us to  
7 uncover trade-throughs in real time. We are,  
8 however, engaged in other states right now under  
9 non-disclosure.

10 The Securrex data repository between  
11 2008 and 2012 has identified over \$16 billion of  
12 Reg NMS NBBO trade-through harm. The question in  
13 Pennsylvania is not if you've been harmed. It's  
14 how much of that \$16 billion belongs to you?

15 When Representative Mustio asked about  
16 time-stamped reports, both pension funds said they  
17 do not receive time-stamped trading reports.  
18 Without time-stamped reports, there is no possible  
19 way of monitoring broker-dealer activities.

20 Even FINRA's own Blue Sheets, used for  
21 investigation and enforcement, did not contain  
22 timestamps, which are a critical piece of  
23 information needed to catch Reg NMS-violated trades  
24 until April of 2013.

25 Trade-through violations pose serious

1 exposure, potential claims and sanctions to  
2 RIA/broker-dealers. With FINRA attempting to  
3 police the market with specific fines and sanctions  
4 of best execution failure, SEC and FINRA  
5 arbitrations are a process that all broker-dealers  
6 certainly try to avoid.

7           However, all broker-dealers do, under  
8 the rules, report all stock transactions to FINRA.  
9 And in return, FINRA provides trade-through reports  
10 to all broker-dealers right on their broker  
11 compliance reporting system.

12           For every pension fund we have talked to  
13 we ask the same question: Has your broker-dealer  
14 ever given you a credit for a trade-through  
15 violation? The answer from each of them has been  
16 no, and the fiduciary from each fund has stated  
17 that they had no knowledge that these FINRA  
18 trade-through reports even existed.

19           This is like going to a bank and  
20 depositing a hundred dollars and the bank crediting  
21 your account only 99. And after the bank caught  
22 the error, they never credited your account;  
23 instead, ignoring the entire situation. The bank  
24 has a fiduciary duty to give you that dollar, and  
25 broker-dealers have fiduciary duties to credit you

1 on each and every trade-through violation.

2 Here is a high-level description of our  
3 Securrex process. Our repository captures each and  
4 every message that comes out of the National Market  
5 System from SAIC and NASDAQ. We capture all quotes  
6 and trade messages from the 20,672 issuers across  
7 16 reporting facilities in chronological order. We  
8 perform high-frequency trade audits on each stock  
9 every 25 milliseconds, or 40 times per second,  
10 identifying trade-throughs.

11 Our quantitative process filters out  
12 over 100 different Reg NMS rule exceptions that  
13 classify a trade as exempt. What remains in our  
14 trade repository are faceless trades violating the  
15 Order Protection Rule 611.

16 I have given each of you a top 30 list  
17 of trade-through stocks. Out of the top 30, SERS  
18 has held or holds 25 of them, and PSERS, 21 out of  
19 30. On page 7 of our handout, there's an item  
20 called TRO rating. The TRO rating is proprietary  
21 to Securrex and is the percentage of 25 millisecond  
22 examination bars that the Securrex repository has  
23 found to be violated by issuer; by stock.

24 Citi, for example, is a 17 percent  
25 violated stock; meaning that 17 percent of all 25



1 millisecond bars, a violated trade or multiple  
2 trades have been found within that bar. Between  
3 2008 and 2012 alone, there are over \$1.4 billion of  
4 investor harm in Citi trades alone.

5 I'm sure everyone in the room is  
6 familiar with the Madoff scandal. Unfortunately, I  
7 know someone who worked for me whose entire family  
8 savings were invested at Madoff. If any of those  
9 Madoff victims would have had their trades executed  
10 audited by Securrex, the entire Madoff scandal  
11 might have never happened. Our repository would  
12 have caught the fictitious trades and would have  
13 exposed the fraud immediately.

14 Your pension funds are exposed to these  
15 types of problems. As I said in my opening,  
16 innovation and technology solves these business  
17 problems.

18 In closing, I want to thank you again  
19 for the opportunity to speak, and thank SERS and  
20 PSERS who, while embracing technology, are  
21 trailblazing a solution and the wide-scale issue  
22 that affects so many people, not only in  
23 Pennsylvania but around the world. This should not  
24 be a left- or right-aisle issue. This is an issue  
25 that has no party, no affiliation, and affects

1 almost everybody. Our hopes are that the trustees  
2 of SERS and PSERS are thrilled to meet us. This is  
3 a financial problem that has been going on for  
4 years and can now be solved.

5 While we are not the silver bullet,  
6 Securrex can absolutely help make a material dent  
7 in your underfunded pensions. We also can become  
8 an important part of future compliance programs  
9 making sure that your pension truly gets best  
10 execution and catching all future violated trades  
11 and potential schemes that expose Pennsylvania  
12 funds to fraud.

13 I leave you with a quote from Winston  
14 Churchill: If you are passionate about making  
15 change to a system that is flawed, hit the point  
16 once, then come back and hit it again a tremendous  
17 whack.

18 Reg NMS violations are a systemic  
19 problem that can be solved. But only when large  
20 pension funds like SERS and PSERS stand up and tell  
21 broker-dealers, the SEC and FINRA, that lost money  
22 and exposure that reside in NMS trade-through  
23 violations are not acceptable.

24 That is our mission: To solve the  
25 enormous financial harm of trade-through

1 violations. We are here to help recover funds and  
2 damages, and hope that our presence and original  
3 information is welcomed in Pennsylvania.

4 Again, many thanks to Representative Mustio  
5 and others who support our solution and Resolution  
6 701. Thank you.

7 MAJORITY CHAIRMAN METCALFE: Thank you,  
8 Mr. Marks.

9 Questions to start with, Representative  
10 Saccone.

11 REPRESENTATIVE SACCONI: Thank you, Mr.  
12 Chairman.

13 This is an area -- I'm really foggy on  
14 this whole thing. So, I'm learning and I'm  
15 listening to what you're saying because, in many  
16 ways in our society, we are at the mercy of  
17 technology today. We just assume propriety in the  
18 absence of any evidence to the contrary.

19 So, as I was listening to you--I'm an  
20 old investigator--I wanted to know, are you saying  
21 that these trade-throughs are actually fraudulent,  
22 or are they just a glitch in the system that we  
23 need to correct, or are you saying there's actual  
24 fraud involved in this?

25 MR. MARKS: It's a fiduciary fraud from

1 broker-dealers. There's really no -- There's no  
2 blame; there's no fiduciary-duty problem going on  
3 with your pension funds. This is a problem that  
4 has been going on for years and years. And only  
5 because we have really smart quants that can take  
6 this raw data and put it in a usable form that  
7 uncovers all these violations, we can now show that  
8 the broker-dealer is not executing your stock  
9 trades at the best possible price.

10 REPRESENTATIVE SACCONI: Is that because  
11 the trades happen so fast that they don't know, or  
12 are they intentionally not doing this?

13 MR. MARKS: If you saw the 60 Minute  
14 piece on Sunday, Michael Lewis said it right off  
15 the opening: This is a systemic problem, and it's  
16 being rigged. This is part of that process.

17 The stocks are not going too fast. They  
18 have the ability to match 3 million stock trades  
19 per second. So, it's not going too fast. The  
20 problem is that their systems look internal for  
21 their inventory of shares before they go out to the  
22 markets. That's typically the problem. And they  
23 bet -- they bet on an oscillating market coming  
24 back and forth that they're going to catch your  
25 trades. And if they don't catch them, they fall

1 outside the NBBO. And if they're falling outside  
2 the NBBO, there's nobody policing it. There's  
3 nobody slapping their hands.

4 REPRESENTATIVE SACCONI: It's very  
5 interesting, and I thank you. I hope that we're  
6 going to hear from PSERS and SERS that, you know,  
7 everything's not (sic) hunky-dory, and there's no  
8 reason we should be looking at this. This looks  
9 like a way to recover a lot of money, and --

10 MR. MARKS: Again, it's an issue that  
11 really -- I'm only one guy making so many calls and  
12 contacting so many people. There's probably 45  
13 states that don't know that we exist yet. There's  
14 a solution for this problem, so it's --

15 It's really no fault of anybody in  
16 charge of a pension fund. They could have guessed  
17 this could be happening, but they never could have  
18 guessed there was a solution, though.

19 REPRESENTATIVE SACCONI: Thank you.  
20 Thank you very much.

21 MAJORITY CHAIRMAN METCALFE: Thank you,  
22 Representative Saccone.

23 Representative Sims.

24 REPRESENTATIVE SIMS: Mr. Marks, thank  
25 you for your testimony.

1                   How are you paid? Whether it's other  
2 municipalities or states that have hired you, how,  
3 traditionally, are you paid?

4                   MR. MARKS: On recovery. We offer a  
5 free service. We will -- Just get us the data.  
6 We'll run the data. We'll give you the report. If  
7 you need legal --

8                   In arbitration, we have people that we  
9 can recommend that -- you know, we're out there;  
10 people know who we are, and these arbitration  
11 lawyers are now coming out of the woodwork to  
12 engage with us. We can definitely give a referral  
13 there. But we get paid on recovery.

14                   REPRESENTATIVE SIMS: Other than just  
15 the cost of documentation to get the information to  
16 you, there's no up-front cost?

17                   MR. MARKS: There really is no up-front  
18 costs.

19                   REPRESENTATIVE SIMS: And what kind of a  
20 percentage on recovery?

21                   MR. MARKS: It's a sliding scale based  
22 on the broker-dealer. So, every broker-dealer has  
23 a separate account with us. So, if a pension fund  
24 has 20 broker-dealers, each one is individual with  
25 us. And depending on how much we are able to

1 recover per broker-dealer, it's a sliding tier  
2 scale of percentage.

3 REPRESENTATIVE SIMS: Thank you.

4 MAJORITY CHAIRMAN METCALFE:

5 Representative Dunbar.

6 REPRESENTATIVE DUNBAR: Thank you, Mr.  
7 Chairman.

8 Thank you, Mr. Marks, for your  
9 testimony. I found it very interesting.

10 Representative Sims did kind of grab my  
11 question there. But, just out of curiosity, it'd  
12 be that like some type of contingency fee  
13 arrangement, I assume.

14 When you identify the violations, let's  
15 call them, how does the recovery process go? I  
16 mean, are you going after the broker-dealers, or  
17 where are you getting the recovery from? Do you  
18 have to do it through a court process or what?

19 MR. MARKS: It's typically through FINRA  
20 arbitration rather than state court. It can be  
21 going through state court. The fast track is  
22 through FINRA arbitration. Those usually take  
23 between 9 and 12 months.

24 But the first line you'd like to do is  
25 send the letter to your broker-dealer or your

1 trading advisor and say, we found these problems.  
2 Here is the proof, here is the report; make us  
3 whole. Let's add a compliance program, which is  
4 really an important part of my presentation; is  
5 that, a trade-through audit should be part of a  
6 monthly or quarterly compliance program to find  
7 these on an every-month basis, because they're not  
8 going to stop.

9 But the process is sending a letter to  
10 the broker-dealer to say, we found these problems.  
11 Just make us whole and we're happy. They don't  
12 want to lose you as an account, and they don't want  
13 to go through an arbitration. If they go through  
14 an arbitration, there's fines, possible  
15 suspensions. There's all sorts of bad things that  
16 could happen to them.

17 REPRESENTATIVE DUNBAR: So you're  
18 telling me that, more often than not, you have a  
19 settlement agreement before you --

20 (Unidentified voice).

21 REPRESENTATIVE DUNBAR: Yeah. Along  
22 those lines -- And excuse me for the multiple  
23 questions. But, along those lines, I'm also  
24 thinking, your business plan, your business model.  
25 It's almost like when you have those security signs



1 in front of your house; even though you don't have  
2 a security system there, you put the sign up so no  
3 one will break into your house.

4 Don't you see, going forward as Securrex  
5 -- because you said it's relatively new and not  
6 everybody knows about it. Don't you see that, in  
7 the future, the broker-dealers may be paying more  
8 attention?

9 MR. MARKS: Absolutely.

10 REPRESENTATIVE DUNBAR: Then recoveries  
11 will be less for you guys going forward.

12 MR. MARKS: If they know they're getting  
13 a pension fund legal to call them on a monthly  
14 basis about trade-throughs, yeah.

15 But the first step is, the fiduciaries  
16 have to demand timestamps. Without timestamps --  
17 It's a start and an end. There's rules that say  
18 they have one second of time to fill your order.  
19 If they send you -- How can you catch these without  
20 having a timestamp? That's the beginning of the  
21 race. If you know the beginning, the end doesn't  
22 mean anything.

23 REPRESENTATIVE DUNBAR: Thank you.

24 MAJORITY CHAIRMAN METCALFE: Thank you,  
25 Representative Dunbar.

1 Representative Daley.

2 REPRESENTATIVE M. DALEY: Thank you, Mr.  
3 Chairman. And thank you, Mr. Marks, for your  
4 testimony.

5 So, if many of these national -- or the  
6 NBBOs are not violations but are the result of the  
7 speed of the system, how does your company  
8 differentiate between the two?

9 MR. MARKS: I don't follow your  
10 question.

11 REPRESENTATIVE M. DALEY: Well, my  
12 understanding is that not everything you find would  
13 necessarily be a violation.

14 MR. MARKS: No. We filter out every  
15 exception prior to laying in our repository.  
16 There's 106 different exceptions where a stock  
17 order might not be eligible to be an auto-executed  
18 trade under NMS. We filter those out. There's a  
19 block trade. If it's an inter-market sweep order  
20 and 104 different others, we filter every one of  
21 those out before it lands in our repository. So,  
22 if it's on your report, it's an auto-executed trade  
23 that's subject to NMS.

24 REPRESENTATIVE M. DALEY: Okay.

25 MR. MARKS: Does that answer your

1 question?

2 REPRESENTATIVE M. DALEY: Yes, it does.

3 Thank you.

4 MAJORITY CHAIRMAN METCALFE:

5 Representative Miller.

6 REPRESENTATIVE MILLER: Thank you, Mr.

7 Chairman.

8 Sir, how long have you guys been around?

9 MR. MARKS: About a year.

10 REPRESENTATIVE MILLER: I think you had

11 said 45 states haven't heard of you, so I'm

12 guessing we're one of the five that have?

13 MR. MARKS: Yes.

14 REPRESENTATIVE MILLER: And I'm

15 guessing -- You made a comment about disclosure

16 agreements. I guess it's safe to say you probably

17 have some arrangement going with somewhere between

18 one and four states?

19 MR. MARKS: Yes, sir.

20 REPRESENTATIVE MILLER: Am I right?

21 (No answer).

22 REPRESENTATIVE MILLER: Correct?

23 MR. MARKS: Yes, sir.

24 REPRESENTATIVE MILLER: And all that's

25 been happening the last year --

1 MR. MARKS: Yes, sir.

2 REPRESENTATIVE MILLER: -- roughly?

3 MR. MARKS: Actually, not even the last  
4 year; the last three, four months.

5 REPRESENTATIVE MILLER: Okay. And going  
6 off of, I think Representative Sims and  
7 Representative Dunbar, the recovery time, the 9 to  
8 12 months, would -- that process for those  
9 contracts, that's already begun?

10 MR. MARKS: No, no, no. Once we do an  
11 examination of the entire trading report, you then  
12 have your list -- you have your report of violated  
13 trades. You then want to write -- That's when the  
14 clock starts on those 9 to 12 months. You want to  
15 write the letters. I mean, it could be two weeks.

16 But if the broker-dealer is unkind to  
17 your advances to get your money back, then you'll  
18 have to start a FINRA arbitration claim, and that  
19 usually takes 9 to 12 months.

20 REPRESENTATIVE MILLER: So, dealing with  
21 somewhere under four or less states that you're  
22 working with now, that process has yet to work its  
23 way through --

24 MR. MARKS: Correct.

25 REPRESENTATIVE MILLER: -- to see how it

1 works as yet?

2 MR. MARKS: It takes a while for people  
3 to get their trading reports.

4 REPRESENTATIVE MILLER: I appreciate  
5 that. And I know I'm short on time.

6 The \$20 billion that's been thrown out  
7 there, it's been mentioned a couple times.

8 MR. MARKS: Yes, sir.

9 REPRESENTATIVE MILLER: That's obviously  
10 not just Pennsylvanian-related --

11 MR. MARKS: No. That's the repository  
12 as a whole.

13 REPRESENTATIVE MILLER: So, when you're  
14 throwing out 20 billion, that's telling me, in my  
15 opinion, a little something too much. It's going  
16 far beyond what I'm really focused on, which is  
17 just Pennsylvania.

18 MR. MARKS: Right.

19 REPRESENTATIVE MILLER: So, is there any  
20 way you can kind of give us a better ballpark  
21 understanding what we're dealing with? Twenty  
22 billion, like you said, it could be everything.  
23 What are we dealing with?

24 MR. MARKS: Well, the 20 billion are  
25 what we call faceless trades. We have all the data

1 for every issue for every trade, and we're looking  
2 to put your face, your pension fund's face, on the  
3 trades that belong to them.

4 The FCC, in a 2004 white paper, said  
5 that 7 and a half percent of all trades are traded  
6 through at 2 point 3 cents. It's an old study.  
7 It's almost 10 years old. But it was really the  
8 first time the FCC ever admitted that there are  
9 trade- through violations in the market.

10 We believe, if you add the number of  
11 shares that have been traded for your pension  
12 funds, total amount of shares of every issuer, and  
13 there's 20,672 issuers -- I pulled up one of your  
14 pension funds. There's 60 pages of holdings. It's  
15 a large number.

16 If you add up the number of shares  
17 total and multiply that out using that formula, I  
18 don't know if that's going to be close or on the  
19 mark. It's really, give us the data and we'll show  
20 you. Give us even three months of data and we'll  
21 show you, and we'll show you for nothing. You can  
22 take a look under the hood. It's like bringing  
23 your car into the guy; don't worry, I'll take a  
24 look at it for nothing and I'll let you know what  
25 the problem is, and you can trust the guy. So

1 really what we're selling, like they said on  
2 60 Minutes, trust and transparency. That's really  
3 the same thing.

4 REPRESENTATIVE MILLER: Thank you, Mr.  
5 Chairman.

6 MAJORITY CHAIRMAN METCALFE: Thank you,  
7 Representative Miller.

8 Representative Cohen.

9 MINORITY CHAIRMAN COHEN: Thank you.  
10 Could you give us some examples of how  
11 much money you saved any state?

12 MR. MARKS: I think I just answered  
13 that, sir, but we are relatively new. We're  
14 engaged in some states in a different process.  
15 Some are getting their data; some are getting  
16 some -- have had presentations; they're mulling it  
17 over, things like that. It's not always easy, as  
18 you know, getting through red tape of a state. So,  
19 um --

20 MINORITY CHAIRMAN COHEN: Are there any  
21 savings you have received -- you have generated yet  
22 for any state?

23 MR. MARKS: No, we're not at that  
24 process yet of getting final recovery.

25 MINORITY CHAIRMAN COHEN: Okay. Now,

1 you said that there's a sliding scale. What does  
2 the scale slide from? What's the maximum; what's  
3 the minimum?

4 MR. SHAH: It's under the false claim  
5 statute; 15 to 50 percent.

6 MR. MARKS: Yeah, it's anywhere from 15  
7 to 50 percent. It's under the False Claim Act of  
8 many states. But that's typically what it is. The  
9 smaller the amount of a broker-dealer, the larger  
10 the percentage, and it slides down as we find more.

11 MINORITY CHAIRMAN COHEN: And where does  
12 the money come from?

13 MR. MARKS: It's comes from broker --

14 MINORITY CHAIRMAN COHEN: No, I  
15 understand that. To what degree is there a  
16 negative impact on the brokers who lose the money?

17 MR. MARKS: They're writing the check.

18 MINORITY CHAIRMAN COHEN: Okay. So you  
19 don't know, is this going to lead to increased fees  
20 from the brokers?

21 MR. MARKS: Increased fees?

22 MINORITY CHAIRMAN COHEN: Yes, for  
23 charging; if they're going to have to defend  
24 themselves. I've learned that very little is free  
25 in this world, and that you generate some revenue



1 from one source and then people have to try to make  
2 it up from another source.

3 MR. MARKS: From my understanding,  
4 broker-dealer deals are fairly standard, 2-20 deals  
5 or whatever they are. They don't want to lose you  
6 as an account. That's the last thing they want to  
7 do.

8 I don't believe your deal with any  
9 broker-dealer is going to change it. If it does,  
10 there's broker-dealers that come and go in every  
11 state, in every pension fund in this country. I  
12 think California just fired 285 of them or  
13 something like that.

14 MINORITY CHAIRMAN COHEN: So you're  
15 saying that there are limits as to how much  
16 broker-dealers can raise their fees because there's  
17 so many other broker-dealers --

18 MR. MARKS: I think you can always say  
19 no.

20 MINORITY CHAIRMAN COHEN: -- competing  
21 with them. I'm sorry, what?

22 MR. MARKS: You can always say no --

23 MINORITY CHAIRMAN COHEN: You can always  
24 say no.

25 MR. MARKS: -- we're not going to accept

1 that.

2 MINORITY CHAIRMAN COHEN: Okay. Thank  
3 you very much, Mr. Chairman.

4 MAJORITY CHAIRMAN METCALFE: Thank you,  
5 Representative Cohen.

6 Representative Mustio.

7 REPRESENTATIVE MUSTIO: Thank you.

8 On your 30 most traded-through equities  
9 that were listed there, I guess what I'm having  
10 trouble understanding is, why doesn't the FCC nail  
11 these people for doing this? That's what I thought  
12 they were there to do. Why would we, as a state,  
13 have to go out, then, and engage a company, pay a  
14 percentage, when the FCC, I always thought, was  
15 supposed to do this stuff?

16 Then the second question I have is,  
17 you're using some acronyms that I'm not familiar  
18 with, and I'm assuming maybe other members aren't  
19 as well. You said FINRA, I think. I don't know  
20 what that is.

21 So, if you could maybe answer those two  
22 questions for me.

23 MR. MARKS: FINRA is the Financial --  
24 What is it?

25 MR. SHAH: FINRA is the Financial

1 Industry Regulatory Authority. The issue is --  
2 FINRA is a private corporation, established in  
3 2007. They are in charge of rule making,  
4 enforcing. They're in charge of all the regulatory  
5 functions.

6 The issue is, and the main thing is,  
7 each of your broker-dealers are provided in the  
8 FINRA system a trade-through report. So, every one  
9 of them has trade-through reports that are being  
10 reported to them.

11 The enforcement side of FINRA, there's a  
12 Chinese firewall up, and they use an antiquated  
13 system called Blue Sheets. This comes from the  
14 paper pit trading days. These Blue Sheets do not  
15 have timestamps, so there's no possible way  
16 enforcement can follow through, because they're  
17 handcuffed.

18 REPRESENTATIVE MUSTIO: I don't  
19 understand that. Why doesn't the FCC -- It seems  
20 like this is pretty available. If the  
21 broker/dealer's getting a list of, these are the  
22 trades that have been violated by us for our  
23 clients, and that's pretty readily available, why  
24 isn't the FCC jumping on it? I'm confused by that  
25 whole process.

1 MR. SHAH: I prefer --

2 MAJORITY CHAIRMAN METCALFE: Maybe we  
3 could ask Mr. Shah to explain that once we get into  
4 his Q and A session, because we're still waiting on  
5 his testimony.

6 Last question from Representative  
7 Saccone before we move on to Mr. --

8 REPRESENTATIVE SACCONI: Sorry --

9 MAJORITY CHAIRMAN METCALFE: -- Shah's  
10 testimony.

11 REPRESENTATIVE SACCONI: Sorry, Mr.  
12 Chairman. Thank you for indulging me.

13 Just so we're clear--don't take this  
14 question the wrong way--but you said you have a  
15 compliance program. Do you sell that as a product,  
16 as part of your business model --

17 MR. MARKS: Yes.

18 REPRESENTATIVE SACCONI: -- so that's  
19 another way you earn money? So after you -- like  
20 Secure Lock (sic), or somebody would do for my  
21 credit card, you'd say, okay, we'll help you to  
22 prevent these trade-throughs by subscribing to my  
23 compliance program? Is that part of what you do?

24 MR. MARKS: Yes, sir.

25 REPRESENTATIVE SACCONI: Real quickly,

1 the last one is because of Chairman Cohen's  
2 question: If you find all these violations and  
3 some of our brokers have to pay back a lot of  
4 money, the question is, basically, if I understand  
5 it right, can they just pass on those fees to PSERS  
6 and SERS, and you can say, no, you're not passing  
7 them on to us. Or, you can say, if you decide to  
8 pass those on to us, we're going to do business  
9 with another broker; is that right?

10 MR. MARKS: Of course.

11 REPRESENTATIVE SACCONI: Okay. Just  
12 wanted to make sure I was clear. Thank you.

13 MAJORITY CHAIRMAN METCALFE: Thank you,  
14 Representative Saccone.

15 Thank you, Mr. Marks. If you want to  
16 stay at the table there, maybe there will be a  
17 question that crosses over after Mr. Shah gives his  
18 testimony during the Q and A, if you'd like to  
19 still stay at the testimony table.

20 Our next testifier is Mr. Samir Shah.  
21 He's the manager with IQuant out of Westport,  
22 Connecticut. Sir, you can begin when you're ready  
23 there.

24 MR. SHAH: Thank you. My name is Samir  
25 Shah, and I'm with IQuant, Westport, Connecticut.

1 I have over 20 years' experience developing  
2 algorithmic trading systems and infrastructure. I  
3 provide forensic analysis and data evidence to our  
4 regulators.

5 The issue concerning -- This is a  
6 systematic issue of trade-throughs. What I really  
7 want to briefly present are four things: What  
8 FINRA, the Financial Institute Regulatory  
9 Authority's, trade-through reporting system  
10 consists of, and how enforcement works and show you  
11 where the loophole is.

12 I want to give you a visualization of  
13 what a trade-through actually is. Because we're  
14 talking this term, sometimes we need to really  
15 define so you have a full picture of what a  
16 trade-through is. I'll demonstrate the scale of  
17 the problem, and then how it impacts the  
18 Pennsylvania retirement system directly.

19 If I can direct you to page 5 of the  
20 Securrex materials, you should have FINRA Reg NMS  
21 Trade-Through Report Card on the top. Every  
22 broker-dealer is provided a report, in an on-line  
23 system powered by FINRA, which is the regulator,  
24 reporting all their trade-throughs. This data has  
25 been available on-line since 2008. This is their

1 notice. This is a regulatory notice to them that  
2 there's a trade violation. They have a duty to  
3 report this back to you under your broker  
4 agreement. So you guys all have policies in place  
5 for best execution; if there's an issue, that  
6 they're supposed to report this to you.

7 On the bottom, the enforcement division  
8 uses a different system. They use what's called an  
9 Electronic Blue Sheet from the pit days. They used  
10 to mail out blue forms; give people 10 days to  
11 respond. That system went electronic in the '80's.  
12 There's not many businesses that would be able to  
13 run today using a system from the '80's that  
14 they've band-aided and band-aided, and that's what  
15 enforcement has.

16 So, consequently, these trade-through  
17 violations are not enforced, predominately because  
18 your broker-dealer is not reporting back to you the  
19 trade-throughs knowing that enforcement has no way  
20 of enforcing it. So, they turn a blind eye.  
21 That's, essentially, the issue.

22 Your fund pays 12 cents per hundred  
23 shares traded that you sell to FINRA as a trading  
24 activity fee for them to police, make rules and  
25 enforce the rules. You're paying them to do this

1 job. They're not doing the job.

2 In 2013, FINRA brought 1,535  
3 disciplinary actions across the 700,000 plus  
4 brokers. They ordered 9 and a half million dollars  
5 in restitution. That's their total amount of  
6 investor harm they recovered; yet, collected \$500  
7 million in fees from the investors to bring back 9  
8 and a half.

9 There is a disconnect. The disconnect  
10 is the fact that the one side is providing the  
11 trade-through violations, and the enforcement side  
12 is handcuffed to do anything about it.

13 If you're relying on the regulators to  
14 do this for you, it's not gonna happen. So, I will  
15 -- If you can keep that last point about this  
16 disconnect, and I'll come back around, and I'll try  
17 to put the two together and show you exactly how  
18 the issue can be resolved.

19 If you could turn to page 9 of the  
20 Securrex materials; should say Trade-Through  
21 Violations with a couple graphics on top, and this  
22 is like -- I mean, this is technical information.  
23 It's difficult to sight-read. But, in essence,  
24 this is the methodology; defined step by step,  
25 exactly how trade-throughs are identified.



1           There's no magic in this whole thing.

2           There's nothing --

3                   UNIDENTIFIED VOICE: (Inaudible words).

4                   MR. SHAH: I'm sorry. (Testifier held  
5           up a document).

6                   MAJORITY CHAIRMAN METCALFE: It says  
7           Trade-Through Violations on the top?

8                   MR. SHAH: Right. It says Trade-Through  
9           Violations on the top.

10                   CHAIRMAN METCALFE: It's in the Securrex  
11           Trade-Through Recoveries packet.

12                   MR. SHAH: Correct; the one with the red  
13           arrow. That's the methodology that's used to  
14           identify trade-throughs, step by step.

15                   On page 11 would probably be the best  
16           graphic, which will kind of put this all together.  
17           You should see a ticker tape view. It's just a  
18           graph. What this really says is, in blue are all  
19           the best bids. In red are all the best ask prices.  
20           The green asterisks are all the trades that are  
21           going through, and the black dots are outside of  
22           the best bid and offer; therefore, it's a  
23           trade-through. And that's what a trade-through  
24           looks like.

25                   When you look at the market data, that's

1 a graphical representation of what a trade-through  
2 is. In this particular half a second, there were  
3 nine Cisco trade-throughs, and it identifies the  
4 side that's violated and the amount of harm.

5 The previous page, 10, actually shows  
6 the forensic trade-through evidence, and it should  
7 be a blue table. On this page, what you're going  
8 to see is, on November 14th of 2013, at 9:39 in the  
9 morning and two seconds, a trade for 10,000 shares  
10 of Cisco was executed at \$20.88. The best bid at  
11 that moment was \$20.90. The best offer was \$20.91.  
12 That trade was traded through two cents on the  
13 seller side. The seller was harmed \$200.00.

14 The reality is, it doesn't really  
15 matter what kind of commission rate you negotiate  
16 or what kind of commission recapture program you  
17 negotiate if you're being traded through. If  
18 you're not getting the best execution, it's a big  
19 problem. It's just a big problem that you need to  
20 be aware of.

21 On page 12 is the actual data evidence.  
22 Together, pages 10, 11 and 12 is an example of one  
23 trade-through violation, and that's the evidence  
24 that's required and that's what supports a claim  
25 that you may have for reimbursement.

1           The scale of this problem, if you turn  
2 to page 6 of the Securrex report, and it's going to  
3 say U.S. Equity Markets up on top. This is just a  
4 summary between 2008 and 2012. There are 20,672  
5 equities, 10 trillion shares trading \$300 trillion  
6 of value. Out of 27 billion 25 millisecond audits,  
7 376 million of 'em had trade-throughs; had at least  
8 one trade-through. That averages close to 300,000  
9 times per day.

10           This is a systemic problem. This is  
11 not a problem specific to your pension. This is a  
12 problem between the regulators not being armed to  
13 do it, and the onus is on you to be vigilant.

14           When you look at a rating scale on page  
15 8, you're going to see an example of Citi, and this  
16 is a rating report for Citi, and the rating for  
17 Citi is KM-17. The rating system is simply, the  
18 first letter indicates how frequently per day the  
19 symbol's being violated. The second letter is the  
20 volume of violations in the repository, and the  
21 number is the percentage of audits that have  
22 trade-throughs.

23           This information, in a separate package  
24 on the back for PSERS, I took your holdings. You  
25 had 2,500 holdings, and I put the rating of each

1 one of those. It's for your information so you  
2 could do a top-down, high-level perspective of,  
3 this is an issue that we trade a lot of. This is a  
4 highly manipulated issue; this is one we're  
5 investigating.

6 If you turn to page 2 of the PSERS  
7 specific package--it should be towards the end--  
8 it's going to have an orange -- It's going to say  
9 PSERS 13-F Filings. It's an orange form. This,  
10 hopefully, will drive home the issue.

11 I pulled the SPY data, J.P. Morgan and  
12 Morgan Stanley directly from your FCC 13 filings.  
13 In each of these issues, PSERS has traded over a  
14 million shares. SPY's exchange-traded fund  
15 tracking S&P-500s, an industry benchmark. Out of  
16 638 million trades for SPY, 94 million were traded  
17 through. That's 15 percent of all trades were  
18 traded through. When you look at it from a volume  
19 perspective, out of 288 billion shares traded, 82  
20 billion were traded through. That's 30 percent of  
21 the volume.

22 The issue here is not a question. This  
23 is a systemic problem. This one issue you guys  
24 traded over 2 million shares on. And if 30 percent  
25 of them are traded through, that's a significant

1 problem. But this isn't the FCC's 2.3 cents a  
2 share. The average trade-through is 35 cents a  
3 share. So, the fact that you're paying 2 cents in  
4 commissions, if you're being shorted 35 cents a  
5 share, there's a bigger problem.

6 MAJORITY CHAIRMAN METCALFE: I think  
7 we're probably ready to enter the Q and A with you,  
8 if you've made your vital points.

9 MR. SHAH: If I could make one closing.  
10 Although the subject matter may be  
11 technical in nature, it's really a simple issue  
12 with forensic evidence. It's cut and dry. There's  
13 nothing subjective about this. You either got the  
14 best execution or you did not.

15 Securrex will identify your trade-  
16 through claims. Just state your claim, sell your  
17 claim; life moves on.

18 Thank you for your time.

19 MAJORITY CHAIRMAN METCALFE: Thank you,  
20 Mr. Shah.

21 Our first question will be from  
22 Representative McGinnis.

23 REPRESENTATIVE MCGINNIS: Thanks, Mr.  
24 Chair.

25 Mr. Shah, PSERS and SERS reports about

1 \$750 million of expenses each year in managing  
2 their portfolio. How does this lack of best  
3 practices show up? Does it show up in that number,  
4 or is it showing up in poor stock performance?

5 MR. SHAH: It's invisible.

6 REPRESENTATIVE MCGINNIS: What's that?

7 MR. SHAH: It's invisible. You have  
8 financial statements that you publish. You have  
9 actuarial tables that are built. The fact of the  
10 matter is, if your fund is being shorted and is  
11 owed money, you wouldn't know.

12 REPRESENTATIVE MCGINNIS: Well, they  
13 would be getting less performance than what they  
14 should otherwise be getting --

15 MR. SHAH: Correct.

16 REPRESENTATIVE MCGINNIS: -- fair  
17 enough?

18 The other question I have is,  
19 historically, it would seem to me this would be a  
20 worse problem years ago when technology was not so  
21 good because it would be much easier for a broker/  
22 dealer or a specialist to have a book on paper  
23 and --

24 Is technology naturally alleviating the  
25 problem?

1 MR. SHAH: It's a bigger problem today.  
2 Back in 2004, when they came up with these Reg NMS  
3 rules, the order matching engines could match a  
4 hundred trades a second. Now they can do  
5 3 million. Yet, the rules -- They gave one second  
6 of time to where the brokers can -- the market  
7 makers can legally fill your order at the worst-  
8 bidder offer of that second. They have 3 million  
9 time slots.

10 In my professional business, my job is  
11 to write algorithms to take advantage of this.

12 REPRESENTATIVE MCGINNIS: Something you  
13 couldn't do if this was a paper world?

14 MR. SHAH: If it's a paper world --  
15 There wouldn't be a one-second rule in a paper  
16 world.

17 REPRESENTATIVE MCGINNIS: Thanks, Mr.  
18 Chair.

19 MR. SHAH: You're welcome.

20 MAJORITY CHAIRMAN METCALFE: Thank you,  
21 Representative McGinnis.

22 Representative Miller.

23 REPRESENTATIVE MILLER: Thank you, Mr.  
24 Chairman.

25 Sir, your company is IQuant. Is there a

1 relationship between you and Securrex?

2 MR. SHAH: I provide forensic data and  
3 forensic analysis.

4 REPRESENTATIVE MILLER: For them?

5 MR. SHAH: Correct.

6 REPRESENTATIVE MILLER: Okay. So, there  
7 is a relationship between you two?

8 MR. SHAH: Correct.

9 REPRESENTATIVE MILLER: And if I'm  
10 getting this straight, the idea is that, it's  
11 actually, there's no -- our state system hasn't  
12 done something wrong. You've developed a  
13 fundamental -- You've seen a fundamental flaw in  
14 how all the states are -- I guess, would be doing  
15 the business, correct, if I understand?

16 MR. SHAH: Correct.

17 REPRESENTATIVE MILLER: You guys provide  
18 services that doesn't cost anything up front, but  
19 you make your money off of what you are able to  
20 find or return?

21 MR. SHAH: Securrex makes money on  
22 recovery.

23 REPRESENTATIVE MILLER: On what comes  
24 back to us?

25 MR. SHAH: An example is, if



1 Pennsylvania had a false claims act, it would be  
2 brought under that section.

3 REPRESENTATIVE MILLER: Okay. So, on  
4 return; so on recovery, return. So they get the  
5 money back on that. So there's no money that's up  
6 front with us.

7 But, I know that there's going to be  
8 testimony, and I'm kind of jumping here just to  
9 this point. Representative Mustio brought up the  
10 FCC and, obviously, I'll let that good question be  
11 answered when you have a chance.

12 But, in particular with the FCC, are we  
13 limited? This sounds like restitution for -- when  
14 I'm looking at what we got. You have fraud; you've  
15 got restitution that's paid back. Does the FCC  
16 limit or is the FCC vague in actually allowing for  
17 that type of -- for restitution to occur in these  
18 circumstances?

19 MR. SHAH: The FCC -- Part of the  
20 recovery process would be to notify the FCC. See,  
21 the --

22 REPRESENTATIVE MILLER: But do they  
23 allow it?

24 MR. SHAH: Yes.

25 REPRESENTATIVE MILLER: They do?

1 MR. SHAH: Yes, absolutely. The FCC  
2 enforcement division is your tool. The problem is,  
3 their hands are cuffed with data. When you come to  
4 them with evidence of harm, they have to take  
5 action now.

6 REPRESENTATIVE MILLER: Thank you. I  
7 have no further -- I'll leave Representative  
8 Mustio's question.

9 Thank you, Mr. Chairman.

10 MAJORITY CHAIRMAN METCALFE: Thank you,  
11 Representative Miller.

12 Representative Mustio, did you want to  
13 finish your question that we were starting into  
14 there before Mr. Shah testified.

15 REPRESENTATIVE MUSTIO: Mr. Shah, my  
16 question to Mr. Marks was, if this information is  
17 readily available, the broker-dealers get these  
18 sheets that say there have been violations, why  
19 isn't the FCC clamping down on them? I mean, it  
20 seems like it's a pretty obvious scenario. That's  
21 why we have them there, I thought; to protect us.

22 MR. SHAH: In my dealings with the FCC,  
23 it was upon their request in a separate matter  
24 where they were asking if we had the ability to  
25 identify trade-throughs.

1           Their enforcement division does not have  
2           the same tools as the regulatory side.  Whether  
3           it's a Chinese firewall, I don't know what the  
4           situation is over there.  If they were doing their  
5           job, there would be no need for this.

6           REPRESENTATIVE MUSTIO:  That's the  
7           answer, I guess.

8           MAJORITY CHAIRMAN METCALFE:  
9           Representative Saccone.

10          REPRESENTATIVE SACCONI:  Yes, thank you.  
11          Thank you for your testimony.  I just  
12          want to be clear in my mind.  I'm trying to wrap my  
13          arms around all this.

14          If our stock, just say a PSERS stock, is  
15          traded at the worst -- you call it at the worst  
16          trade, and we are harmed, who benefits?  Does the  
17          broker get the extra money, the difference?  You  
18          say, like, in one of those trades, you identified  
19          the owner lost \$200.  So who gained \$200?  Did the  
20          broker make out because he traded at the worst  
21          trade?  Somebody benefited from it.

22          MR. SHAH:  The counterparty of that  
23          trade benefited.

24          REPRESENTATIVE SACCONI:  So the counter-  
25          party -- So how are we going to make the broker

1 pay? When the broker pays restitution, or whatever  
2 you want to call it here, it's -- He didn't make  
3 money on this, so it's actually coming out of his  
4 pocket. He could literally go bankrupt on the  
5 amount of restitutions we could ask him to pay  
6 back?

7 MR. SHAH: But it's his duty. He's  
8 providing you --

9 REPRESENTATIVE SACCONI: I'm not  
10 defending him. I just want to know. How is he  
11 going to pay for it? He didn't make the \$200 on  
12 that trade. Somebody else did that owned the stock  
13 that got it at the worst trade; somebody that's  
14 unidentified and we can't attach to them. We can't  
15 go back and ask them to give us the difference. So  
16 we're asking this broker to give us the difference.

17 MR. SHAH: That's correct.

18 REPRESENTATIVE SACCONI: And that broker  
19 is going to say, well, I didn't earn any money on  
20 it. If we have millions of these things, he could  
21 actually not be able to pay us back, or he might go  
22 bankrupt trying to pay back the violations. Is  
23 that a fair -- I just want to make sure I  
24 understand it.

25 MR. SHAH: That is a fair assessment.

1 That's in the FINRA sanction guideline. They take  
2 that into account, because it's not just that \$200.  
3 They made \$200 in commissions, right? So they'd  
4 have to disgorge their commissions. They'd  
5 disgorge any profits related to that. The  
6 potential sanction from FINRA on this is five to  
7 \$200,000 per violation.

8 REPRESENTATIVE SACCONI: Wow. Okay.

9 MR. SHAH: The entire market and price  
10 discovery is based on this. And it's not just your  
11 trade being executed wrong; it's other people  
12 having to take an action based on that trade  
13 report.

14 REPRESENTATIVE SACCONI: Okay. Thank  
15 you.

16 MR. SHAH: You're welcome.

17 MAJORITY CHAIRMAN METCALFE:  
18 Representative Cohen.

19 MINORITY CHAIRMAN COHEN: Thank you, Mr.  
20 Chairman.

21 You are providing an alternative means  
22 of enforcing the law that avoids the legal process,  
23 right?

24 MR. SHAH: Correct. We're bringing to  
25 your attention these violations. What we're hoping

1 is, you're going to settle -- you're going to  
2 approach your broker-dealers, demonstrate to them  
3 how much you've been harmed; and if they write you  
4 a check, then the whole thing goes away. If  
5 they're not willing to write you the check, then  
6 you have alternative remedies that you're -- you  
7 have to decide to seek that.

8           MINORITY CHAIRMAN COHEN: So right now  
9 they could be criminally prosecuted, but apparently  
10 they're rarely criminally prosecuted. And this  
11 system avoids the risk of criminal prosecution in  
12 return for prompt payments?

13           MR. SHAH: Correct. What's special in  
14 your situations, these are state funds. State  
15 funds, as a private trader, I don't have the same  
16 abilities to recover as you as a state do. You as  
17 a state, you not only have the regulators, but you  
18 have your state A.G., because it's a reverse false  
19 claim.

20           MINORITY CHAIRMAN COHEN: Okay. Thank  
21 you very much, Mr. Chairman.

22           MAJORITY CHAIRMAN METCALFE: Thank you,  
23 Representative Cohen.

24           Representative Evankovich.

25           REPRESENTATIVE EVANKOVICH: Thank you,

1 Mr. Chairman.

2 Thank you for your testimony. I have a  
3 lot of homework to do on this issue. I have two  
4 very brief questions.

5 The first one is: In your analysis  
6 where you outline the \$12.7-million-per-day losses,  
7 is that a net of transactions that benefit the  
8 buyer and the seller?

9 MR. SHAH: Um-hm.

10 REPRESENTATIVE EVANKOVICH: So you took  
11 the transactions that benefited the buyer and then  
12 the transactions that benefited the seller and  
13 lumped them together, or are those just one side?

14 MR. SHAH: But every transaction's  
15 got -- Trade's got a buyer and a seller, and a  
16 trade-through, one of those parties got harmed.  
17 One of them may have benefited, but even that  
18 benefit -- Let's say PSERS was the beneficiary of  
19 a trade-through that went in your favor. Well, I  
20 would require indemnity from the broker because you  
21 don't want a clawback. You don't want them to  
22 break the trade later.

23 REPRESENTATIVE EVANKOVICH: Right. I  
24 guess my question, though, and I'm just trying to  
25 understand it, is, that 12.7 million a day, is that

1 one side or is that both sides of the transaction  
2 added together?

3 MR. SHAH: It's one side --

4 REPRESENTATIVE EVANKOVICH: It's one  
5 side, so somebody --

6 MR. SHAH: -- the harmed party.

7 REPRESENTATIVE EVANKOVICH: So, in  
8 theory, if somebody would have simultaneously  
9 executed a -- If this was a trade-through that  
10 benefited the seller, and the buyer, then,  
11 simultaneously executed a sale at the same time,  
12 that would have been true benefit realized by that  
13 buyer than seller?

14 MR. SHAH: This is just the tip of the  
15 iceberg. What happens is, this identifies the  
16 transactions. And then, once you're investigating  
17 these transactions, if there's front running  
18 involved; if there is -- Other stuff kind of comes  
19 out through this process. This is just the  
20 nonsubjective. It's either a red light or a green  
21 light.

22 REPRESENTATIVE EVANKOVICH: And the  
23 second question is, just real briefly: Is this  
24 only a problem on market order -- trades that are  
25 executed on market-order pricing, or is this --



1 MR. SHAH: Limit orders, when they are  
2 converted, they turn into a market order. So, it's  
3 a question -- It's not a question of the trading  
4 decision. Your advisors may be providing a  
5 strategy. This is, fundamentally, the execution.  
6 The execution is flawed.

7 REPRESENTATIVE EVANKOVICH: I guess my  
8 question would be, in that transaction, then, if  
9 they're executing a limit order transaction --

10 MR. SHAH: You're entitled to a price  
11 improvement.

12 REPRESENTATIVE EVANKOVICH: Right.  
13 Okay. Thank you.

14 MAJORITY CHAIRMAN METCALFE: Thank you,  
15 Representative Evankovich.

16 For our last question, Representative  
17 Krieger.

18 REPRESENTATIVE KRIEGER: Thank you, Mr.  
19 Chairman.

20 I'm like Representative Evankovich; I  
21 have some homework to do.

22 Question: If a broker-dealer is not  
23 making any money off of how this is executed now,  
24 and if he's exposing -- I guess the question I  
25 have, why is the broker-dealer exposing himself to

1 liability if he's not making any money? Is it a  
2 systems issue? Why aren't they doing what you're  
3 describing they should do?

4 MR. SHAH: If the broker-dealer -- They  
5 program computer systems to do the order matching  
6 execution. It's not your contact. This is all  
7 automated. So, if their computer system is making  
8 a mistake and they have notification that they made  
9 a mistake on this, and they turn -- What they're  
10 doing is, they're turning a blind eye. They're not  
11 reporting it back to you.

12 Everyone is going to make a mistake.  
13 But if I'm a fiduciary to you and I make a mistake,  
14 and instead of coming to you and going, I made this  
15 mistake; it's \$200. What can I do to correct it,  
16 and I just ignore it, that's the underlying issue.

17 MR. MARKS: Even if they're the broker  
18 on the other side.

19 MR. SHAH: If they're also engaging --  
20 Because, in a lot of these agreements, you're  
21 allowing them to be counterparty. So if you think  
22 of the trade-through situation; if it's outside, if  
23 you pull the Blue Sheet and they happen to be the  
24 counterparty to that trade, then it's a  
25 straight-out rip-off.

1                   REPRESENTATIVE EVANKOVICH: Well, that's  
2 what I'm getting at. I mean, these are very  
3 sophisticated parties. These broker-dealers, they  
4 have the capacity to do exactly what you're doing.

5                   You mentioned counterparty. Are you  
6 suggesting that they're the counterparty and that's  
7 the benefit they're receiving?

8                   MR. SHAH: Without pulling the Blue  
9 Sheet, the enforcement, we don't know. You never  
10 know who the counterparty is. The enforcement  
11 division has that Blue Sheet tool that identifies  
12 all the parties but no timestamp.

13                   What we do is, we provide the key that  
14 ties their trade-through reporting with the Blue  
15 Sheets, with your trade data, and that's the  
16 evidence. Now you have a basis to look at it. If  
17 the basis shows that they were a counterparty and  
18 you're traded through, your state A.G. is gonna  
19 want to get involved.

20                   REPRESENTATIVE EVANKOVICH: Thank you,  
21 Mr. Chairman.

22                   MAJORITY CHAIRMAN METCALFE: Thank you,  
23 Representative Krieger.

24                   The 60 Minute story was mentioned a  
25 couple of times. I didn't have a chance to watch

1 that. What was their conclusion as far as the  
2 question Representative Krieger just asked? Did  
3 they come to a conclusion that certain individuals  
4 or entities were attempting to rip people off  
5 through this?

6 MR. SHAH: I did not watch it.

7 MR. MARKS: I did watch it. What the  
8 author of the book suggested right off the bat is  
9 that the market is rigged; that there's all sorts  
10 of front running going on.

11 For those who don't know what front  
12 running is, it's when a broker/ dealer knows that  
13 you're interested in buying shares of stock. And  
14 while your shares of stock are going to the  
15 exchange to get filled, they have algorithms that  
16 are written that will send the same order to the  
17 exchange faster than your order and will arrive  
18 there milliseconds quicker than your order.

19 So, if your order is for \$20 and they're  
20 front-running your order, they'll buy those shares  
21 at \$20 and sell you shares at a higher price  
22 because they know you're a buyer in the market.

23 MAJORITY CHAIRMAN METCALFE: And the  
24 only way to police that is to have the timestamps  
25 from when it was placed and when it was sold?

1           MR. MARKS: Well, we suggest that not  
2 only do they front-run, which is very hard to --  
3 which I know attorney generals, especially in the  
4 state of New York, is trying to get his arms  
5 around. We suggest that not only are they front-  
6 running you, but they're not executing your trade  
7 at the right price either.

8           So, you're actually paying more at times  
9 because you got front run. But, even at the price  
10 that you were supposed -- at the front-run price,  
11 you're not getting that price either. You're  
12 getting a higher price than that.

13           MAJORITY CHAIRMAN METCALFE: Right.  
14 Well, thank you both for sharing your expertise  
15 with us today. I appreciate you bringing your  
16 expertise to the committee today on this very  
17 technical issue that takes some explanation and  
18 takes some time and due diligence on the members'  
19 parts to understand it. So I appreciate that.

20           MR. MARKS: Thank you. And we're happy  
21 to explain to anybody and everybody. Thank you.

22           MAJORITY CHAIRMAN METCALFE: Thank you.

23           MR. SHAH: Thank you.

24           MAJORITY CHAIRMAN METCALFE: Thank you.

25           Have a great day.

1           Our next testifiers will be Mr. Clay and  
2 Mr. Durbin. Mr. Clay, of course, Executive  
3 Director with PSERS, Pennsylvania, and then Mr.  
4 Durbin is with SERS, the state system; school  
5 system, state system, the retirement systems.

6           Mr. Clay, if you'd like to kick it off.

7           MR. CLAY: Yes, I'll start.

8           Again, good morning, Chairman Metcalfe,  
9 Chairman Cohen, members of the House State  
10 Government Committee. I am Jeffrey Clay, the  
11 Executive Director of the Public School Employees'  
12 Retirement System. Also with me is James Grossman,  
13 PSERS Chief Investment Officer. We do welcome the  
14 opportunity to be here today.

15           Before I actually start my formal  
16 comments, I do want to thank the previous  
17 testifiers for providing additional information  
18 that's going to help us in our due diligence  
19 process here. So I do thank them for that.

20           Continuing with my formal testimony:

21           PSERS takes its fiduciary duties quite  
22 seriously, and as such, it constantly seeks new and  
23 innovative ways to serve and protect the interests  
24 of our beneficiaries. With respect to the subject  
25 of today's hearing, these efforts include carefully

1 monitoring the domestic equity trading operations.  
2 In fact, PSERS has, for many years, retained a  
3 professional consultant to do so. Zeno Consulting  
4 Group, LLC currently serves in this capacity.

5 As you know, Securrex Services, LLC  
6 recently approached members of the Pennsylvania  
7 Legislature and, according to news reports, has  
8 also contacted other legislative bodies across the  
9 country to introduce their services as a means to  
10 recover possible stock trade-through violations of  
11 the Security Exchange Commission rules.

12 PSERS has not been approached directly  
13 by Securrex. Nonetheless, PSERS remains willing to  
14 consider details of a potential analysis, if they  
15 desire to submit it to us, and to take appropriate  
16 action if a compelling business case is developed.

17 Although PSERS has not been contacted by  
18 Securrex before this hearing, we've had numerous  
19 recent conversations with consultants, investment  
20 managers and other service providers concerning  
21 Securrex's claims. We have also begun a dialog  
22 directly with the FCC on this matter and requested  
23 a parallel dialogue with FINRA. I will briefly  
24 summarize our findings to date:

25 We have thus far been unable to

1 document any case where the kind of forensic  
2 analysis promoted to the legislature by Securrex  
3 have been successful in providing benefit to any  
4 large public pension system.

5 Further, SEC Rule 611 noted by Securrex  
6 is a compliance rule and does not specifically call  
7 for punitive damage or restitution to market  
8 participants. It is therefore currently unclear,  
9 at this point, under what legal precedent that  
10 recovery of possible damages to PSERS is possible.

11 Neither exchanges nor broker-dealers  
12 have any fiduciary duty to PSERS and appear to have  
13 no legal obligation to provide data to us. We are  
14 therefore concerned that they might not choose to  
15 voluntarily cooperate in compiling the vast  
16 quantities of data that appear to be necessary for  
17 the Securrex strategy, or whether a regulatory body  
18 such as the SEC would compel them to do so.

19 However, the SEC has confirmed to us  
20 their oversight role in this regard, and that there  
21 are relevant precedents for the SEC to conduct  
22 investigations based on information provided to  
23 them from the market participants or  
24 whistleblowers.

25 It is not clear whether, if we assume



1 that PSERS has been a victim of trade-through  
2 violations and can substantiate its claims, harm to  
3 PSERS has been of such a significant nature to  
4 warrant the cost of the audit and legal recovery  
5 efforts against multiple brokers. While PSERS, of  
6 course, should pursue any instances of viable  
7 claims that it can assert, the materiality and the  
8 viability of the potential claims in this case are  
9 far from certain.

10 It is not possible for PSERS, at this  
11 time, to accurately predict fees that would be  
12 incurred by PSERS to retain the services of  
13 Securrex, including its nominal fee to cover its  
14 quant cost for a full 60-month audit, the cost of  
15 its legal partners used to recover funds that may  
16 be owed, or the amount of Securrex's share of the  
17 revenue recovery.

18 In addition to these costs, we will  
19 need to carefully quantify the potentially  
20 substantial burden on PSERS' staff time and  
21 resources to undertake this type of project, as  
22 well as the possibility that PSERS would be  
23 obligated to pay fees or other expenses regardless  
24 of any recovery realized.

25 In short, in keeping with PSERS'

1 fiduciary duty of prudence, a full cost-benefit  
2 analysis would need to be made before engaging  
3 Securrex.

4           These concerns do not mean that PSERS is  
5 unwilling to undertake the project proposed to you  
6 by Securrex. As you can see, additional analysis  
7 needs to occur before we can determine what action  
8 is in the best interests of our members. We intend  
9 to continue to obtain additional information to  
10 make a fully-informed business decision.

11           Thank you again for the opportunity to  
12 appear before you today. Mr. Grossman and I will  
13 be happy to answer any questions you may have. We  
14 also note that a representative from Zeno  
15 Consulting Group, LLC is also present to assist  
16 you. Thank you.

17           MAJORITY CHAIRMAN METCALFE: Mr. Clay,  
18 it surprises me a little bit that the focus of your  
19 testimony seems to be Securrex more than it is the  
20 nature of the issue that we were discussing today  
21 that the resolution is written about, and that's  
22 related to the pricing and the best price, and  
23 these trades that are being made that we may be  
24 shorted in.

25           As you think about that for the Q and A,

1 I'd really like your thoughts on the issue and the  
2 resolution rather than on this company that gave  
3 testimony today. It's really not between you and  
4 them. This is between you and us. As fiduciaries,  
5 we want to make sure that if we're getting  
6 shortchanged, we want to make sure our systems are  
7 capturing it.

8 So, I really want your thoughts on the  
9 issue; not on Securrex. And I think a lot of my  
10 colleagues would probably concur.

11 Mr. Durbin, if you could lend some  
12 testimony to the issue rather than Securrex, we'd  
13 appreciate it.

14 MR. DURBIN: Thank you, Mr. Chairman. I  
15 am Dave Durbin, the Executive Director of the State  
16 Employees' Retirement System. To my right is Tom  
17 Brier, SERS' Acting Chief Investment Officer.

18 As you know, during SERS' and PSERS'  
19 budget hearing, Representative Mustio introduced  
20 the notion that there may be new technology to  
21 potentially allow investors to more accurately  
22 identify when a stock trade is not executed within  
23 the Security and Exchange Commission's National  
24 Best Bid and Offer, NBBO, framework. We thank you,  
25 Representative Mustio, for bringing this to our

1 attention.

2 As H.R. 701 rightly indicates, SERS has  
3 a fiduciary duty to its members. It's an  
4 obligation we take very seriously. On any given  
5 day, SERS' staff is actively investigating the  
6 performance of current and potential investment  
7 managers, as well as researching ideas, products  
8 and services that may help improve our stewardship.  
9 Thus, it was the natural application of our day-to-  
10 day commitment that caused us to begin research  
11 shortly after the hearing.

12 Specific to today, HR 701 encourages  
13 SERS to embrace new technology that purports to be  
14 able to identify stock-trading price violations.  
15 Once identified, there is an implication that it  
16 will be easy to recover sums related to each  
17 transaction. As we understand it, the technology  
18 is designed to scrutinize trades covered by the  
19 SEC's Reg NMS Rule 611, a complex framework for  
20 stock exchanges and firms regulated by the  
21 Financial Industry Regulatory Authority, or FINRA;  
22 a lot of acronyms this morning.

23 The SEC and the exchanges' compliance  
24 functions are vigilant in identifying and  
25 correcting violations. In fact, in January 2013,

1 the SEC rolled out its own Market Information Data  
2 Analytics System, otherwise known as MIDAS. Among  
3 other things, it uses microsecond timestamps to  
4 analyze orders and quotes on national exchanges, as  
5 well as trade executions against those orders.

6 Admittedly, our research has not been  
7 comprehensive, but we think it's important to let  
8 you know that, so far, we have yet to uncover  
9 evidence that would support the claims of large-  
10 scale, unaddressed violations.

11 In the past weeks, we have scanned a  
12 number of sources and have, so far, found very  
13 little litigation in this area; none specifically  
14 related to Reg NMS, which is suggested as being so  
15 prevalent, and none including a public pension  
16 plan. We did find three SEC administrative  
17 matters, two against exchanges and one against a  
18 broker. FINRA's online database revealed one  
19 disciplinary action and ordered a company to pay  
20 restitution for failing to provide customers with  
21 best execution in certain transactions.

22 We've also reached out to our industry  
23 associations and our peer networks. To date, we  
24 have received no responses to indicate that others  
25 sense that NBBO violations are occurring unchecked.

1 We heard from some states that looked into  
2 technology-based offerings but decided not to move  
3 forward either because they believed their current  
4 monitoring scenarios to be providing sufficient  
5 risk mitigation or because they had not identified  
6 a vendor that met the due diligence criteria they  
7 employ to meet their fiduciary standard,  
8 particularly as related to relevant references and  
9 evidences of success.

10 None of this is to say that violations  
11 do not occur. I'm sure they do. Even when all  
12 parties act in good faith, mistakes can be made,  
13 and dynamic markets evolve rapidly. I think you  
14 might be interested, at a very high level, knowing  
15 just a little bit more about how the safeguards  
16 that SERS has in place to monitor and address  
17 potential problems.

18 Our first line of defense is an  
19 aggressive offense. We go after, as fiduciaries,  
20 the very best companies that we can find with which  
21 to invest our funds. Our standard due diligence  
22 process related to any manager who may invest in  
23 the public markets is multifaceted. One key  
24 component is an 18-page set of questions which  
25 seeks to uncover evidence related to matters such

1 as the history and outcomes of regulatory reviews,  
2 order management systems, trade execution quality  
3 monitoring processes, trade cost analysis, examples  
4 of error correction, compliance monitoring,  
5 exception reporting.

6           You get the idea. We're pretty thorough  
7 with that. I would be happy to share a copy of  
8 that with the committee if you think that would be  
9 helpful, sir.

10           Even after we do verify that we are  
11 engaging high-quality managers, we don't simply  
12 take it on faith that every firm engaged by every  
13 manager executes every trade without error. We  
14 verify.

15           In 2011, after a competitive bid, SERS  
16 renewed its contract with the firm Abel Noser to  
17 provide third-party monitoring of trade execution  
18 quality and trader commissions. The firm performs  
19 a detailed analysis of equity trade data against  
20 the volume weighted average price prevailing across  
21 SERS' trades on a quarterly basis.

22           The foundation for their review is a  
23 broad data set that includes every SERS transaction  
24 that occurred during the quarter, as provided by  
25 our custodial bank. In this respect, SERS uses an

1 industry-standard practice of monitoring execution  
2 levels related to market benchmarks and total  
3 commission costs. It is crucial in identifying  
4 anomaly trends that emerge, either by security, by  
5 broker or by manager. SERS execution performance  
6 has ranked in the top quartile when compared to all  
7 peers in the Abel Noser universe.

8           During the contract period so far, Abel  
9 Noser has evaluated more than 500 million shares  
10 traded on domestic exchanges and has flagged fewer  
11 than 10 situations that warranted additional  
12 scrutiny. To be clear, there are many reasons that  
13 a trade could appear to be out of compliance,  
14 but -- and I think this is the crucial point,  
15 appearance alone does not confirm the presence of a  
16 violation itself.

17           H.R. 701 asserts that as many as 7.5  
18 percent of all stock shares have NBBO violations  
19 and cites \$20 billion in documented cases between  
20 2008 and 2013. Representative Mustio's budget  
21 hearing questions asserted that about 2.3 cents, if  
22 I remember correctly, sir, per violation is  
23 recoverable. SERS has not been able, at this  
24 point, to independently verify those facts, nor are  
25 we comfortable with the implicit validation of



1 damages that they imply. Additional research  
2 related to both data and methodology is necessary.

3 That being said, we understand and we  
4 share your interest in ensuring that our pension  
5 system is retaining every possible dollar. SERS is  
6 committed to exploring opportunities that have the  
7 potential to help us become an even more efficient  
8 operation. Several weeks ago, we reached out to  
9 and set up a meeting with a potential vendor.  
10 Unfortunately, the vendor canceled subject to  
11 negotiation of non-disclosure agreements, which  
12 we're still in the process of completing. We are  
13 working through those issues now, and we will  
14 continue to move forward in the coming weeks.

15 Thank you.

16 MAJORITY CHAIRMAN METCALFE: Thank you.

17 Members? Representative Mustio?

18 REPRESENTATIVE MUSTIO: Thank both of  
19 you for your testimony.

20 Mr. Clay, I agree with what you said 100  
21 percent. I know that you have -- both of you run  
22 professional organizations, and this is really  
23 nothing more than a summary of due diligence that I  
24 would expect everybody to do.

25 The only thing I would correct is in the

1 paragraph -- at least for this representative, it  
2 says, as you know, Securrex recently approached  
3 members of the Pennsylvania Legislature. They did  
4 not approach me. It came up in a conversation and  
5 I was intrigued in the process.

6 In my business, separate from the  
7 legislature--I have a business that my partners are  
8 running--we're always looking for ways to out do  
9 the competition. And there are times when you go  
10 into the market in sales, and it's very difficult  
11 to get in that front door because you have  
12 consultants lined up already that you're using  
13 that, in some cases, can be defensive because they  
14 don't have that technology.

15 I don't know if that's the case in this  
16 scenario. But I thought it was prudent on our  
17 part, as the legislature, at least my part, to do  
18 my job once I was aware of it, and the problem that  
19 we're facing in this state, to bring this forward.

20 MR. CLAY: And I do thank you for  
21 bringing it to our attention.

22 REPRESENTATIVE MUSTIO: So I don't  
23 disagree with anything you said there.

24 Mr. Durbin, you talked about Abel Noser  
25 and the data that they reviewed, the 500 million

1 shares traded, and there were 10 situations that  
2 warranted additional scrutiny, and some of those  
3 may be out of compliance or may not be; just  
4 depends. You just have to look it at it in more  
5 detail.

6 Do I remember correctly, from the  
7 testimony at the appropriations hearings, that you  
8 do not get -- you have not received timestamp  
9 reports, though; is that correct? These would just  
10 be your regular, hey, they traded the way they were  
11 supposed to trade; all the normal compliance of  
12 what we expect of our broker-dealer, but not the  
13 behind-the-scenes computer, algorithm-driven  
14 trading processes that we're talking about today,  
15 to be fair; is that correct?

16 MR. DURBIN: Your memory is correct.  
17 Yes, sir.

18 REPRESENTATIVE MUSTIO: If I'm hearing  
19 and reading what you're saying here, and  
20 understanding it correctly, you're saying, hey,  
21 this may or may not be something that we're gonna  
22 look at, but we have some more questions we want to  
23 ask?

24 MR. DURBIN: We certainly learned a  
25 great deal hearing the presenters that preceded us

1 here, and we're intrigued by the notion.

2 REPRESENTATIVE MUSTIO: I guess, Mr.  
3 Chairman, that's where I am on this as well.

4 Do you see anything that needs to be  
5 changed, I guess, in the language of the  
6 resolution? Some of these percentages have been  
7 attributed to me. I'm attributing them to a report  
8 from the SCC in the early 2000s. So, I don't  
9 know -- It took me a couple days to figure out what  
10 an NBBO was, okay? So, the 7 and a half percent  
11 was from a SEC report previously.

12 I'm still a little bit intrigued. And,  
13 Mr. Clay, you said you're having dialogue with the  
14 SEC on some of these issues. I think the prior  
15 testifiers brought up some really good points where  
16 there's this daggone firewall when you're dealing  
17 with technology on one side and not on the other.  
18 It boggles my mind as to why they're not regulating  
19 it. You certainly have the clout, with the size of  
20 your pension systems and the problems that are  
21 going on nationally, to put pressure on them to ask  
22 those questions and get us answers.

23 My conclusion, Mr. Chairman, is, we're  
24 all on the same side, and anything that we can do  
25 to help move things along -- If these guys are full

1 of hooley, I want to know it, too, all right? But I  
2 don't know enough about algorithms and computer  
3 systems and all that to know if they are or aren't.  
4 That's why I really wanted to shed some light on  
5 this, using the resolution.

6           Again, if there's any language in here  
7 that should be changed, we'll be happy to look at  
8 that as well. Thank you.

9           MR. DURBIN: Thank you.

10           MAJORITY CHAIRMAN METCALFE:  
11 Representative Maloney.

12           REPRESENTATIVE MALONEY: Thank you, Mr.  
13 Chairman.

14           This is like a quagmire; kind of like  
15 what government does best. I think, just for a  
16 simple clarification to me, when I hear the  
17 7.5 percent stock shares and the 20-billion-dollar  
18 figure that's been thrown out a couple times, I'm  
19 getting the sense that you folks don't necessarily  
20 agree with that.

21           And I guess, what my question is, is, if  
22 through your own internal audit, if you will, or  
23 your due diligence, have you identified or can you  
24 assure us of any improprieties that you have seen  
25 or identified anything with respect to it, even

1 just being a technical problem, in light of the  
2 testimony we heard earlier?

3 MR. GROSSMAN: I mean, we're taking a  
4 look at the issue. We're not aware of any NBBO  
5 violations at this point in time. It doesn't mean  
6 they don't exist. But we are looking at the  
7 situation.

8 We are a little bit surprised at the  
9 7 and a half percent. That's a very large number  
10 for the FCC to just let go. I mean, the FCC is  
11 responsible for protecting the investing public;  
12 not only us but also ordinary citizens. So I'd be  
13 very surprised if it is 7 percent, and it's  
14 something we're gonna look at a little more  
15 closely.

16 REPRESENTATIVE MALONEY: Do we have a  
17 timeframe of when -- Let's just say this 7 percent  
18 reared its ugly head, if you will. Do we have a  
19 timeframe of when this supposedly started?

20 MR. GROSSMAN: I'm not aware of the  
21 timeframe other than the FCC --

22 REPRESENTATIVE MALONEY: So when you say  
23 you're looking into it, I would think it would be  
24 difficult or, at least to some extent, you're gonna  
25 have to dig to be able to identify this.

1           MR. BRIER: Correct. You'd have to go  
2 through and potentially look at a day's trading of  
3 a security and take a look at it and see what type  
4 of violations truly exist in that security. That's  
5 the type of digging you'd need to do to get the  
6 granularity that you would need to check to see if  
7 the claims are accurate.

8           MR. DURBIN: We'd just add that we can't  
9 verify or provide independent verification where  
10 the 7 percent comes from. It's been reported, but  
11 in our own review, we don't see that within our own  
12 system.

13           REPRESENTATIVE MALONEY: Okay. Do you  
14 have any idea of any percentage?

15           MR. DURBIN: No, I really don't at this  
16 point in time. We are still looking at this issue.  
17 Since the time when we had the hearings, we've  
18 taken a further, more scrutinized view of our  
19 procedures and processes. But, to date, I don't  
20 have anything that I can report to you as being  
21 found.

22           REPRESENTATIVE MALONEY: All right.  
23 Thank you, Mr. Chairman. Thank you,  
24 gentlemen.

25           MAJORITY CHAIRMAN METCALFE: Thank you,

1 Representative Maloney.

2 Mr. Clay, during the budget hearing, I  
3 understand that Zeno Consulting was mentioned as  
4 the firm that you use. Since the testimony, since  
5 the budget hearings, have you found if they offer a  
6 program that includes a trade-through forensic  
7 analysis?

8 MR. CLAY: The answer to that is no, and  
9 that's the answer, I believe, we gave at the budget  
10 hearing also; that they do not do that. They are  
11 -- our consultant insured best execution of their  
12 trades.

13 MAJORITY CHAIRMAN METCALFE: Does anyone  
14 that either of you use do a trade-through forensic  
15 analysis?

16 MR. CLAY: At the level being proposed  
17 by the other testifiers here, the answer would be  
18 no.

19 MR. DURBIN: The answer is no for us.

20 MAJORITY CHAIRMAN METCALFE: And from  
21 your testimony today, is it safe to say that both  
22 entities are going to be continuing to do some  
23 research into what's being discussed here today and  
24 if it's actually a viable alternative to help us  
25 realize some additional gains for the systems?



1 MR. CLAY: Absolutely.

2 MR. DURBIN: We have a lot more to  
3 learn, and we'd like to learn it.

4 MAJORITY CHAIRMAN METCALFE: Well, I  
5 think all of us here learned a lot today and  
6 appreciate everyone's testimony in taking part in  
7 that teaching process and instruction process for  
8 all of us.

9 I think that's all the questions we  
10 have.

11 Representative Cohen, you have a  
12 question?

13 MINORITY CHAIRMAN COHEN: Yes. As  
14 time's gone, the market volume has gone way up.  
15 There are many more transactions than there used to  
16 be, and I believe the number continues to increase  
17 over time. So, if one percent of the trades have  
18 this problem, or one-tenth of one percent or  
19 one-hundredth of one percent, it's more and more  
20 trades that are affected as time goes on.

21 They say there's \$700 million of  
22 commissions paid. Do you have any sense as to how  
23 much money can be involved in this for your pension  
24 funds?

25 MR. CLAY: I guess, from our

1 perspective, this applies to the U.S. equity side  
2 of things that are domestically traded. In 2013,  
3 my memory serves correctly, we had about 112  
4 million shares that were traded. So, 7.5 percent,  
5 if we use 7 percent, that's 8 million trades,  
6 roughly. I'm using big round numbers here.

7 So, it's significant. I'm not sure that we  
8 see the size of recoveries that we've heard so far,  
9 at least not for our perspective. That may be in  
10 other plans, other systems. And that's a real  
11 back-of-the envelope, completely unaudited  
12 guesstimate.

13 MINORITY CHAIRMAN COHEN: Okay.

14 Thank you very much, Mr. Chairman.

15 MAJORITY CHAIRMAN METCALFE: Thank you,  
16 Representative Cohen.

17 Thank you, gentlemen, for being with us  
18 today. Thank you, Representative Mustio, for your  
19 resolution, and appreciated the chance to consider  
20 that today, and gained us additional information,  
21 hopefully, for the benefit of the Commonwealth.

22 So, motion to adjourn, Representative  
23 Maloney; seconded by Representative Cohen. This  
24 meeting is adjourned.

25 (At 10:31 a.m., the hearing concluded).

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C E R T I F I C A T E

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