

ILLINOIS POLLUTION CONTROL BOARD  
JUNE 30th, 2009

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**JUL 13 2009**

**STATE OF ILLINOIS**  
**Pollution Control Board**

PEOPLE OF THE STATE OF ILLINOIS, )  
)  
Complainant, )  
)  
-vs- )  
)  
PACKAGING PERSONIFIED, INC., )  
an Illinois corporation, )  
)  
Respondent. )

PCB 04-16  
(Enforcement-Air)

REPORT OF PROCEEDINGS of the above-entitled  
matter held at 209 North York Street, Elmhurst,  
Illinois, on the 30th day of June, 2009, commencing  
at the hour of 9:00 a.m.

ILLINOIS POLLUTION CONTROL BOARD  
100 WEST RANDOLPH STREET  
SUITE 11-500  
CHICAGO, ILLINOIS 60601  
HEARING OFFICER: MR. BRADLEY HALLORAN

A P P E A R A N C E S :

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OFFICE OF THE ATTORNEY,  
STATE OF ILLINOIS  
69 West Washington Street  
Suite 2800  
Chicago, Illinois 60602  
(312) 814-3000

BY: MR. CHRISTOPHER GRANT  
MS. PAULA BECKER WHEELER

Appeared on behalf of the Complainant;

DRINKER, BIDDLE & REATH, L.L.P.  
191 North Wacker Drive  
Suite 3700  
Chicago, Illinois 60606  
(312) 569-1000

BY: MR. ROY M. HARSCH  
MS. YESENIA VILLASENOR-RODRIGUEZ

Appeared on behalf of the Respondent.

1 HEARING OFFICER HALLORAN: Good  
2 morning, everyone. We're back on the record.  
3 This hearing has been continued on record  
4 from yesterday, June 29th, 2009.

5 My name is Bradley Halloran. I'm  
6 a hearing officer with the Illinois Pollution  
7 Control Board. I'm also assigned to this  
8 matter entitled People of the State of  
9 Illinois, Complainant, versus Packaging  
10 Personified, Inc.

11 Today is June 30th, 2009. It's  
12 approximately 9:00 a.m. As an aside, it's  
13 Mr. Harsch's birthday, so happy birthday,  
14 Mr. Harsch.

15 In any event, the People have  
16 rested their case in chief yesterday and it's  
17 the Respondent's case in chief now. I  
18 believe this is probably their third or  
19 fourth witness. But in any event,  
20 Mr. Harsch.

21 MR. HARSCH: Yes. My next witness  
22 will be Richard Trzupsek.

23 (Witness sworn.)  
24

1 WHEREUPON:

2 RICHARD TRZUPEK

3 called as a witness herein, having been first duly  
4 sworn, was examined and testified as follows:

5 DIRECT EXAMINATION

6 BY MR. HARSCH:

7 Q. Mr. Trzupsek, would you please state  
8 your full name for the record?

9 A. Richard Trzupsek.

10 Q. And where are you currently employed?

11 A. Mostardi Platt Environmental.

12 Q. And can you briefly -- and you're a  
13 chemist?

14 A. I am a chemist.

15 Q. And how long have you been in the  
16 environmental consulting business?

17 A. I've been in this industry for over  
18 25 years.

19 Q. And can you briefly describe your  
20 relevant work experience as it relates to air  
21 pollution matters, especially in the printing  
22 industry?

23 A. Sure. I've spent many years as a  
24 stack tester. Was considered an expert in different

1 stack test methods, including those commonly used  
2 for the printing industry control devices and  
3 actually lectured at industry seminars and EPA  
4 seminars on different stack test methods.

5 I have permitted and consulted  
6 with a number of printers, and specifically  
7 flexographic printers in the Chicago area and around  
8 the country.

9 Q. And in the 2000-2002 -- strike that.

10 In your earlier examination by  
11 Mr. Grant there were questions raised concerning  
12 your testimony in a proceeding. Can you explain for  
13 the Board what that proceeding was?

14 A. I'm assuming you're referring to the  
15 adjusted standard hearings for Bema, Formel and  
16 Vonco. I was approached by those companies, as well  
17 as US Converting who was in the group at the time,  
18 to attempt to find a way to comply with the  
19 flexographic printing rule 35 IAC 218.401, or  
20 failing that, to get some type of relief.

21 So I participated as the  
22 consultant for that group as we negotiated with  
23 Illinois EPA and attempted to find a way to get  
24 relief from the flexographic printing rule.

1 Q. And is that the same group  
2 Mr. Bloomberg testified regarding?

3 A. Yes, that is correct.

4 Q. And I draw your attention to the black  
5 binders, Exhibits 5, 6 and 7, book one.

6 A. Yes. I see them.

7 Q. Are those the Board's final decisions  
8 granting adjusted standard relief?

9 A. Yes.

10 Q. And I draw your attention to  
11 Exhibit 2. Can you explain what that is? Excuse  
12 me, Exhibit 1. Can you explain -- that's been  
13 admitted into evidence. Can you explain what that  
14 is?

15 A. Exhibit 1 is a copy of my resumé.

16 Q. Is it true and accurate to the best of  
17 your knowledge and belief and up-to-date?

18 A. Yes, it is.

19 Q. It does not list all of your  
20 professional experience or your publications?

21 A. No, it does not.

22 Q. Have you continued to do work for  
23 other flexographic printers other than Packaging?

24 A. Yes, I have.

1 Q. When were you first asked to provide  
2 assistance to Packaging?

3 A. Packaging initially contacted me in  
4 November of 2001.

5 Q. And at that time you were working at  
6 Huff & Huff?

7 A. That is correct.

8 Q. And what came of that initial request?

9 A. I had been -- after I was contacted, I  
10 went to a meeting shortly thereafter with Dominic  
11 Imburgia, I believe Joe was there and Dominic's  
12 partner, Phyllis Muccianti.

13 Q. And what did you find when you first  
14 went there?

15 A. They had been advised by the inspector  
16 that, you know, they had several potential  
17 violations.

18 Dominic and Phyllis had been  
19 attempting to go through the permit forms, go  
20 through the rules. My first visit, Phyllis  
21 specifically had a pile of permit forms that she was  
22 attempting to fill out and a spreadsheet where they  
23 were attempting to fill out their past emissions.  
24 But the rules are very complicated, the permit forms

1 are very complicated, that's why people like me  
2 exist.

3 And they were, like a lot of  
4 people, frustrated and not understanding and they  
5 wanted to turn it over to an expert.

6 As a matter of fact, I remember  
7 Dominic's first statement to me was what do I need  
8 to do, we're going to do whatever we need to do,  
9 tell me what I need to do. And that was the  
10 attitude that I found when I initially came in.

11 Q. And, in fact, did they turn the  
12 project over to you?

13 A. They did. You know, Dominic and  
14 Phyllis asked for a proposal, which I quickly  
15 produced. There really were no questions about the  
16 scope and they turned me loose to file all the  
17 required paperwork and advise them on what they  
18 needed to do to be in compliance.

19 Q. And was that project commenced prior  
20 to the receipt of the violation notice dated  
21 January 25, 2002? Which if you want to look at it  
22 to refresh your memory, it's at Exhibit 10.

23 A. Yes. By that time I had already began  
24 preparation of the original CAAPP permit forms as



1 well as starting to gather the data so that we could  
2 start reporting on emissions.

3 Q. Did you assist in preparation of a  
4 response to the notice of violation?

5 A. I did.

6 Q. Draw your attention to -- did  
7 Packaging submit a response to the violation notice?

8 A. Yes, they did.

9 Q. Please look at Exhibit 11 and tell me  
10 what that document is.

11 A. This appears to me to be our response  
12 to the notice of violation that was prepared by  
13 their attorney at the time, Mark Steger.

14 Q. And you essentially assisted in the  
15 drafting of that letter?

16 A. I did.

17 Q. And in that letter -- the letter  
18 speaks for itself. Is it fair to say that that  
19 letter outlines the steps that Packaging intended to  
20 take to bring the facility into compliance that you  
21 had already undertaken?

22 A. Yes, it does.

23 Q. And did you proceed, in fact, to  
24 prepare the various deliverables that are outlined

1 in that letter?

2 A. Yeah. Those were already under  
3 preparation at this time and I was -- I continued on  
4 that work.

5 Q. Did you prepare a Clean Air Act permit  
6 application?

7 A. I did.

8 Q. And if you'd look at Exhibit 56?

9 A. Yes.

10 Q. Have you prepared other CAAPP  
11 applications for other sources?

12 A. Many.

13 Q. And what is the general level of  
14 effort and time it takes to prepare a CAAPP  
15 application?

16 A. It takes several -- depending on the  
17 facility, many man days to prepare. There's a great  
18 deal of information that needs to be gathered,  
19 detailed information about the facility and the way  
20 it operates and details of equipment and costs.  
21 Depending on the facility, several thousands  
22 to several tens of thousands of dollars to prepare  
23 it.

24 Q. Was the CAAPP application determined

1 to be complete by Illinois EPA?

2 A. I don't recall if we had a complete  
3 determination.

4 Q. Perhaps if I ask you to look at  
5 Exhibit 14, does that refresh your memory?

6 A. Yes. That is the completeness  
7 determination. Thank you. So it was deemed  
8 determined to be complete by Illinois EPA.

9 Q. Did Packaging Personified -- did you  
10 prepare the annual and -- past and annual emission  
11 reports as you promised for years 1995 through 2001?

12 A. Yes, sir.

13 Q. And if I draw your attention to  
14 Exhibit 13, can you tell me what that is?

15 A. That is the submittal of the passed  
16 emission -- annual emission reports.

17 Q. When you were starting to do this work  
18 for Packaging, did you evaluate the presses that  
19 they had on their status in terms of compliance?

20 A. I did.

21 Q. And what did you conclude?

22 A. That presses one and two, which were  
23 very lightly used, used compliant inks, that is inks  
24 that met the VOM content requirements of 218.401.

1                                   That press five --

2                   Q.       Let's stick with just one and two for  
3 a minute.

4                   A.       I'm sorry.

5                   Q.       Did Packaging have available records  
6 that allowed you to make that determination --

7                   A.       Yeah.

8                   Q.       -- that they used water-based  
9 compliant inks?

10                  A.       Yes, sir.

11                  Q.       And are those the records that you  
12 used to prepare the annual emissions reports?

13                  A.       Yes.

14                  Q.       Did you find in any record that would  
15 have been any evidence of usage of solvent-based  
16 inks on those presses?

17                  A.       No. All the inks used in that press  
18 that I found were compliant inks.

19                  Q.       Based on your experience in the  
20 flexographic printing industry, would it make any  
21 sense to use solvent-based inks on water-based  
22 presses?

23                  A.       No.

24                  Q.       And why not?

1           A.       As Joe Imburgia described, those are  
2 inline presses, they run very slow because they're  
3 running to the speed of the extruder and there would  
4 be -- it would not make any sense to use solvent --  
5 a high speed solvent-based ink on those presses.

6           Q.       And what did you -- did you evaluate  
7 presses four and five?

8           A.       I did.

9           Q.       And what type of presses were those?

10          A.       Presses four and five used  
11 solvent-based inks. They're both larger. I believe  
12 they're both central impression presses, although  
13 I -- yeah, they're both central impression presses.  
14 Six color. Much faster presses than the one and two  
15 and, you know, higher speed.

16          Q.       And what did you conclude specifically  
17 with respect to the compliance status of press four?

18          A.       Press four was not controlled, was not  
19 using compliant inks and it was my judgment that it  
20 was not in compliance with 218.401.

21          Q.       And did you advise Packaging?

22          A.       It did.

23          Q.       And did you look at alternatives --  
24 were you asked to look at alternatives for press

1 four?

2 A. Yes, sir.

3 Q. And what were those alternatives that  
4 you looked at?

5 A. Controlling press four, you know, with  
6 a dedicated control device, moving press four to --  
7 I'm sorry, at that point it was shutting down press  
8 four and, you know, we looked briefly at whether  
9 cross-line averaging would be possible, but that was  
10 not feasible.

11 Q. And why not?

12 HEARING OFFICER HALLORAN: I'm sorry,  
13 Mr. Trzupek. Could you speak up? You're  
14 tailing off at the end and I'm having  
15 trouble.

16 MR. GRANT: He's taking after my style  
17 after listening to me for a day, I think.

18 BY MR. HARSCH:

19 Q. Why was cross-line averaging, in your  
20 opinion, not viable?

21 A. Because the vast majority of the inks  
22 that they used are solvent-based inks. For  
23 cross-line averaging to work, you have to have a  
24 higher percentage of compliant inks that will bring

1 the average down to compliant level.

2 And I don't know the exact  
3 percentage, but I think on an annual basis even then  
4 99 percent of their inks were solvent-based inks.

5 Q. And did you look at the possibility of  
6 converting to water-based inks?

7 A. We briefly considered that, but my  
8 experience with the other printers in the  
9 flexographic industry and specifically the ones  
10 through the adjusted standard led me to believe and  
11 Dominic and Joe confirmed that would just not be  
12 feasible for these presses and their product line.

13 Q. So the only individual compliance  
14 option would be to shut it down or install an add-on  
15 control?

16 A. That is correct.

17 Q. And you ultimately advised Packaging  
18 of that?

19 A. Yes.

20 Q. Did you look at press five?

21 A. I did look at press five.

22 Q. And what did you conclude regarding  
23 press five?

24 A. Well, press five also uses

1 solvent-based inks. And I was advised by Dominic  
2 and Joe that that press had a recirculating oven  
3 that would destroy the VOCs emitted in the tunnel  
4 dryer. So we decided to take a look and see how  
5 efficient that recirculating oven was in destroying  
6 VOCs.

7 Q. And how did you do that?

8 A. Again, at the time EPA was also  
9 looking for, you know, what is your emission rates.  
10 And we had decisions to make about compliance, so my  
11 advice to Dominic and Phyllis was that we should  
12 take a -- do an informal stack test and engineering  
13 study to see how efficient that dryer was and to see  
14 how much capture they were getting on press five,  
15 both to give EPA the information they wanted and to  
16 figure out how much destruction we actually had on  
17 press five.

18 Q. And did you, in fact, perform such an  
19 engineering evaluation?

20 A. I did.

21 Q. And can you -- did you ultimately  
22 provide a letter to Mr. Grant outlining the  
23 engineering study and the results of that study?

24 A. I did.



1 Q. And if you'd look at what's been  
2 marked and accepted as Exhibit 21?

3 A. That is the letter I provided.

4 Q. Can you explain how you performed the  
5 engineering evaluation?

6 A. Certainly. We had ensured that press  
7 five was running at a steady state operation on a  
8 typical job. We measured the amount of VOC coming  
9 into the oxidation section of the recirculating oven  
10 and then the amount that was going out through the  
11 bleed, the portion that doesn't recirculate.

12 We used four EPA methods, US EPA  
13 methods one, two, three and 25A for that purpose.

14 Basically one, two and three  
15 allows you to measure the flow rate, 25A allows you  
16 to measure the VOC concentration at each location.  
17 And by mathematics, afterwards, you can determine  
18 the mass emission rates of VOC at each location.  
19 It's fairly standard methodology.

20 We ran long enough, and with the  
21 method 25A you actually get a trace to see how  
22 steady state the concentration is. I think I  
23 probably ran it for about an hour to make sure we  
24 were getting a steady state emission rate at both

1 locations, which I was satisfied it was. And I  
2 think that gave us a true and accurate picture of  
3 what the destruction in the oven was.

4 We also wanted to evaluate  
5 capture. And for those purposes, we had -- I  
6 believe Joe at the time assisted me in measuring the  
7 amount of ink and solvent used during that test so I  
8 could compare it to what was actually going into the  
9 oxidation section of the dryer and approximate  
10 capture in that way.

11 Q. And what were your -- what did you  
12 conclude in terms of how much VOC was burned and  
13 what the capture was?

14 A. We determined that the capture  
15 efficiency was 82.6 percent, destruction efficiency  
16 was 93.6 percent, for overall control of 77.3  
17 percent.

18 Q. You were present yesterday when  
19 Mr. Bloomberg criticized that test was not compliant  
20 with full stack test requirements?

21 A. Yes, sir.

22 Q. You had no intention when you  
23 performed that for that being a compliance test, did  
24 you?

1           A.       No.

2           Q.       And would you explain the difference  
3 between the engineering test and a compliance test?

4           A.       Engineering tests are done for  
5 technical reasons to determine reliably what  
6 emission rates are. I have used them in other cases  
7 for permitting purposes where we didn't do a  
8 full-blown compliance test, but did as simple  
9 engineering studies submitted through the results  
10 with a permit application. And the permit  
11 application says how did you get this number and,  
12 you know, an emission factor, a mass balance, stack  
13 test, and it's certainly a legitimate means that has  
14 been accepted by the Agency in other circumstances  
15 before.

16                       So our purpose here was to  
17 determine the number technically, not to prove it in  
18 a compliance situation according to a permit  
19 condition.

20          Q.       Are you aware of any regulatory  
21 requirement -- strike that.

22                       You're familiar with the general  
23 language in a construction permit that requires a  
24 formal stack test to be performed following the

1 installation of a control device?

2 A. Yes.

3 Q. And would you explain what those  
4 requirements are?

5 A. Typically, it requires prior notice to  
6 Illinois EPA, it requires submission of a test  
7 protocol that explains what you're going to do and  
8 where you're going to do it. It requires typically  
9 three one-hour emission tests. It requires that the  
10 state be allowed the opportunity to witness the  
11 test, although frequently the state does not. And  
12 it requires submittal of a report in a prescribed  
13 manner in a specific time period after the test is  
14 completed.

15 Q. And you've performed many such tests?

16 A. Several hundred.

17 Q. Are you aware of any regulatory  
18 requirement that would require those various steps  
19 that you've just outlined when performing a complete  
20 stack test other than the language in a construction  
21 permit?

22 A. I am not.

23 Q. Based on -- have you performed other  
24 similar engineering evaluations for other printing

1 operations?

2 A. Yes, I have.

3 Q. And you've done similar engineering  
4 evaluations for other VOC sources?

5 A. Yes, in sources of all types.

6 Q. And based on your experience as a  
7 stack tester and your experience doing these  
8 engineering evaluations, do you have any doubt  
9 regarding whether if a full-blown stack test would  
10 have been performed on press five, that the results  
11 would differ substantially from what you found?

12 A. None whatsoever. As a matter of fact,  
13 I am certain that the tests -- a full-blown stack  
14 test would have shown higher destruction than this  
15 test did, which I'll explain.

16 The requirement during a  
17 full-blown stack test is to try to maximize the  
18 solvent load. Well, as Joseph Imburgia explained  
19 yesterday, the higher the solvent load, the more  
20 there is to burn and the efficiency goes up. And,  
21 again, an IEPA stack test expert and I have  
22 discussed this on many occasions.

23 Q. Is that Kevin Mattison?

24 A. Kevin Mattison. That the higher load

1 means you get better results. We were conducting a  
2 test at a typical load, so the 93.6, in my opinion,  
3 during a full-blown tack test would have only  
4 increased with the conditions that the Agency would  
5 have required.

6 Q. In addition to testing the output or  
7 the destruction efficiency, there are also  
8 requirements, are there not, in the regulations to  
9 demonstrate capture efficiency?

10 A. Yes.

11 Q. And would you explain what those  
12 requirements are?

13 A. The capture efficiency protocols that  
14 were adapted are codified in the 204 series of  
15 methods, which, incidentally, I helped to develop  
16 when I was stack testing.

17 The most common means for a press  
18 like this would be to use a temporary total  
19 enclosure, which means you have a temporary  
20 structure that's erect around the press, a temporary  
21 fugitive exhaust created and then the amount that is  
22 captured to the control device compared to -- is  
23 compared to what's coming out of this temporary  
24 fugitive exhaust. That's actually a longer test.

1 It typically takes two to three days to complete a  
2 204 temporary total enclosure test.

3 Q. So a full blown stack test of press  
4 five, as it existed, would have required you to do  
5 so?

6 A. Correct.

7 Q. Have you ever had reason to believe  
8 that -- strike that.

9 Did you ever receive any feedback  
10 from the Illinois Environmental Protection Agency  
11 regarding whether they accepted or had objections to  
12 your engineering evaluations for press five?

13 A. No.

14 Q. When you had -- there were a number of  
15 telephone conferences as well as the September 2002  
16 meeting with Illinois EPA regarding the violation  
17 notice?

18 A. Yes.

19 Q. And did you -- the results of your  
20 engineering evaluation, were they discussed at those  
21 meetings?

22 A. I believe they were.

23 Q. Did you have any discussions with the  
24 Illinois Environmental Protection Agency regarding

1 whether or not the Agency would support an adjusted  
2 standard relief for Packaging Personified similar to  
3 that which they supported for their competitors,  
4 Formel, Vonco and Bema?

5 A. Yes.

6 Q. And what time frame -- and what was  
7 the outcome of that discussion?

8 A. It was early on in discussions after  
9 the violation notice and it was quickly gotten back  
10 to us -- EPA quickly said to us that they would not  
11 support an adjusted standard for Packaging.

12 Q. And that was following the meeting in  
13 Springfield in September?

14 A. I believe that's the case, yes.

15 Q. Did you apprise Packaging of that?

16 A. Yes.

17 Q. You've been involved in a number of  
18 adjusted standards proceedings before the Pollution  
19 Control Board, have you not?

20 A. I have, yes.

21 Q. Do you have an opinion as to whether  
22 or not the Board is likely to grant an adjusted  
23 standard if the Agency doesn't support it?

24 A. In my opinion, and I so advised



1 Packaging at the time, there was virtually no chance  
2 they would get the adjusted standard without Agency  
3 support.

4 Q. The same would be true of a variance?

5 A. Yes.

6 Q. Did you have any understanding of  
7 whether or not -- excuse me, did the subject  
8 regarding whether Packaging Personified had received  
9 the information package in 1997 from Illinois EPA  
10 ever come up?

11 A. Yes. It came up as early as the first  
12 meeting.

13 Q. And what were you told?

14 A. That they had seen no such package.  
15 That had they known it existed, they would have  
16 responded to it and that they wish they knew it  
17 existed.

18 Q. After you told Packaging that the  
19 Agency was not going to support an adjusted standard  
20 and it wasn't feasible, did Packaging take any steps  
21 with respect to press four?

22 A. They did.

23 Q. And what did they do?

24 A. They decided to shut down press four

1 for printing operations and stop using any ink on  
2 that, shifted production to press five and used  
3 press four exclusively as a rewinder.

4 Q. And do you recall when that last  
5 printing was done on press four?

6 A. It was late in '02. I don't remember  
7 the month.

8 Q. At that point in time you had advised  
9 Packaging, based on your engineering evaluation,  
10 that you believed press five complied with the  
11 substantive requirements of the flexographic  
12 printing rules?

13 A. Correct.

14 Q. And you had, on behalf of Packaging,  
15 submitted an operating permit CAAPP application?

16 A. Correct.

17 Q. And submitted the annual emission  
18 reports?

19 A. Correct.

20 Q. And were working on the seasonal  
21 emission reports?

22 A. Correct.

23 Q. Had you worked with Packaging by that  
24 time with regard to their record keeping?

1           A.       Yes.

2           Q.       And what did you do with respect to  
3 record keeping?

4           A.       Well, we started the work on making  
5 sure that all the records existed. The VOM content,  
6 the inks, of course, was available through MSDS.  
7 And the amount of ink used on each press was  
8 available through what I'd call their job tickets,  
9 but they have a different word for it that they  
10 would plug into the database. So all of that  
11 information existed.

12                         Now it was not in the form that --  
13 in such a form that an inspector could walk in and  
14 look at one file, one book as they have today. But  
15 the information was there in different places and  
16 what we did was start to work on getting that  
17 information to one place, one spreadsheet where it  
18 could be easily understood upon inspection.

19           Q.       So as of the end of 2002, since you  
20 hadn't submitted the SER reports yet, apart from  
21 ERMS concerns, in your opinion was Packaging  
22 Personified at that point in time complying with the  
23 applicable regulations of flexographic printers?

24           A.       In 401, yes. Yeah.

1 MR. GRANT: Which date was this?

2 MR. HARSCH: End of 2002.

3 MR. GRANT: Thanks.

4 BY MR. HARSCH:

5 Q. The Agency, of course, had not taken  
6 any action on the CAAPP permit other than a  
7 completeness determination?

8 A. Correct.

9 Q. Packaging could not have submitted a  
10 construction permit and expect the Illinois  
11 Environmental Protection Agency to have granted it  
12 for the sources that had been built without a  
13 construction permit; is that correct?

14 A. Correct. When those are submitted,  
15 they are denied.

16 Q. Were you ever told to submit  
17 construction permits so they could be denied?

18 A. No.

19 Q. And is that standard?

20 A. Yes.

21 Q. During your discussions with the  
22 Illinois Environmental Protection Agency in the 2002  
23 time frame and regarding the violation notice, did  
24 you discuss the construction sources and the timing?

1 A. Yes.

2 Q. And were you apprised by the Illinois  
3 Environmental Protection Agency with how to proceed  
4 with permitting regarding new source review issues?

5 A. We discussed it, as we had discussed  
6 it for the adjusted standard printers, and it was  
7 then and was with Packaging, a very nebulous issue.

8 Q. And had the -- is it your  
9 understanding, apart from the testimony of  
10 Mr. Bloomberg, that Formel, Vonco and Bema had, in  
11 fact, constructed sources that technically could  
12 have triggered new source review?

13 A. My understanding is that is true in  
14 the case of Formel and Bema. I don't believe it was  
15 true in the case of Vonco.

16 Q. Okay. Did the Agency subsequently  
17 issue operating permits for Formel and Vonco?

18 A. They did.

19 Q. And --

20 A. And Bema.

21 Q. And did they follow their advice in  
22 not requiring NSR review?

23 A. That is correct, there was no NSR  
24 review.

1 Q. And is that based on the fact that  
2 permits were issued that limited them to less than  
3 major source threshold?

4 A. I believe that is the case.

5 Q. Have you reviewed a number of  
6 settlements for other flexographic printers that  
7 have been presented to the Pollution Control Board?

8 A. I have.

9 Q. And with respect to the NSR issue, how  
10 has the NSR issue been dealt with for other  
11 flexographic printers in settlements presented to  
12 the Board?

13 A. I have not seen where that issue has  
14 been the focus of enforcement requiring to go back  
15 through NSR for any of those cases.

16 Q. And is that because, similar to Formel  
17 and Vonco, the two that you said --

18 A. Yeah.

19 Q. -- had permit limitations emitting to  
20 less than major source threshold?

21 A. That appears to be the case, yes.

22 Q. Following the September 2002 meeting,  
23 did you prepare for submittal to the Illinois EPA an  
24 analysis of the emissions history for Packaging?

1 A. I did.

2 Q. And is that found in Exhibit 12?

3 A. Yes.

4 Q. And based on that analysis, was your  
5 conclusion that NSR, in fact, was not required?

6 A. Yes.

7 Q. And that relied on your engineering  
8 evaluation on press five?

9 A. Yes.

10 Q. At the time Packaging was considering  
11 what its options were with press four, did you  
12 provide them with information regarding control  
13 devices for press four?

14 A. Yes.

15 Q. Vendors?

16 A. Yes.

17 Q. And did you -- were you part of those  
18 discussions with Packaging?

19 A. Yes.

20 Q. And did those discussions include the  
21 potential purchase of a used refurbished unit from  
22 equipment suppliers?

23 A. Yes.

24 Q. Is there a difference between a used

1 control device and a refurbished used device sold by  
2 an equipment vendor?

3 A. Very much so.

4 Q. Would you explain that difference?

5 A. There are situations where a  
6 particular company may buy a device from another  
7 company that has used it for ten, 20 years and worn  
8 it beyond its useful life. In that case, it is  
9 really a crapshoot whether that equipment is going  
10 to be reliable or not and often is not.

11 Most manufactures, however, like  
12 Ship & Shore, MEGTEC, Catalytic Products, others,  
13 will purchase -- repurchase for a very small fee  
14 equipment that is used by someone who has either  
15 gone out of business or, you know, has expanded and  
16 no longer needs the control device, refurbish it,  
17 put their name on it and then resell it.

18 In that case, I guess it would be  
19 more like buying a used BMW back from the BMW dealer  
20 who certified it. They've gone through and made  
21 sure that the equipment is working properly,  
22 replacing everything that needs to be replaced and  
23 reselling it as refurbished.

24 Q. You would generally agree then with



1 Mr. Bloomberg's assessment of problems associated  
2 with just buying an unrefurbished, used control  
3 device?

4 A. Yes, I would.

5 Q. Would you ever recommend to a client  
6 that they purchase such a used control device?

7 A. I would not. And, in fact, I have  
8 advised several clients against it.

9 Q. And when you discussed used equipment  
10 with Packaging, were you discussing only the  
11 refurbished used equipment?

12 A. Yes.

13 Q. At the same time or about the same  
14 time as they were shutting down press four and  
15 switching the business to press five did Packaging  
16 also have under consideration the addition of a new  
17 press?

18 A. That started -- at least I was  
19 apprised of it, I believe, early 2003, in that kind  
20 of time frame.

21 Q. So that would have been following the  
22 shut down of press four?

23 A. Correct.

24 Q. And can you characterize the

1 discussions that you participated in?

2 A. Well, I was told that there -- you  
3 know, it might be more business opportunities  
4 available for an eight-color press and that the  
5 company was looking to see if they could have the  
6 business support an eight-color press and  
7 eight-color work.

8 And, of course, I was informed of  
9 that because they were interested in, you know, the  
10 environmental implications, the permit implications  
11 of what that would mean if they moved forward with  
12 that plan.

13 Q. What kind of scenarios were under  
14 consideration?

15 A. Well, at that point I believe they had  
16 already entered into -- were entertaining the  
17 thought of possibly purchasing a business in  
18 Michigan, that would eventually happen. So if that  
19 happened, one of the scenarios was, well, let's  
20 locate it in Michigan instead of Carol Stream and do  
21 nothing because -- just do a full-blown stack test  
22 on five and we're done.

23 There was the possibility of  
24 putting six in, building an enclosure around it, a

1 permanent total enclosure and having a single  
2 control device just for number six, letting five run  
3 as it does.

4                   There was the possibility of  
5 putting six and five in an enclosure with enough  
6 room for a third press and buying an oxidizer that  
7 would be big enough for three if they ever could,  
8 you know, develop the business to the point where  
9 they needed the third press.

10           Q.       Is it your understanding that  
11 Packaging Personified's operations in Carol Stream  
12 are a separate corporate entity apart from the  
13 entity that owns and operates the Sparta, Michigan  
14 plant?

15           A.       I really don't know the structure.

16           Q.       Okay. What was the final decision  
17 that Packaging made?

18           A.       After a good deal of discussion,  
19 Dominic and Phyllis and Joe decided that they would  
20 move six to Carol Stream. Even though at that point  
21 I think the Michigan facility was almost certain and  
22 I remember Dominic's comment at the time that  
23 despite the issues that he knew, you know, it was  
24 difficult to work through the permitting process in

1 this state, he wanted to keep jobs in this state and  
2 this was where the company was founded, this was the  
3 home, this is where they were going to do it.

4 So the decision was made to put  
5 six in Carol Stream, to build a permanent total  
6 enclosure, which I advised Dominic at the time he --  
7 it wasn't required to do, but he agreed to do it as  
8 good faith, and to buy an oxidizer, a 15,000 that  
9 could accommodate a third press should they ever get  
10 business for a third press.

11 Q. Were you present when the -- during  
12 part of the discussions regarding essentially that  
13 this would allow Packaging to settle its differences  
14 with Illinois EPA?

15 A. Yes, yes.

16 Q. Did you prepare a construction permit  
17 application?

18 A. I did.

19 Q. And is that found at Exhibit 17?

20 A. Yes, that is the application.

21 Q. And if you'd turn to Exhibit 20?

22 A. Okay.

23 Q. Did the Agency first deny the  
24 construction permit?

1 A. Yes.

2 Q. And 20 is that denial letter?

3 A. Twenty is the denial letter, yes.

4 Q. And you responded to the issues raised  
5 in that, submitted another application and the  
6 Agency subsequently did issue a construction permit  
7 dated August 13, 2003?

8 A. Yes.

9 Q. And that's found at Exhibit 26?

10 A. Yes.

11 Q. In your mind is this a federally  
12 enforceable permit limiting the -- I know it's  
13 potentially -- strike that.

14 Does condition 2A reflect the  
15 limitation that the source not exceed 25 tons per  
16 year, therefore, qualifies as an area source?

17 A. For 25 tons a year of HAPs and  
18 qualifies as an area source, yes.

19 Q. And what about VOCs?

20 A. Overall VOC emissions are listed in  
21 condition five and are limited to less than 25 tons  
22 per year.

23 Q. So that would be -- then it would be  
24 an enforceable limitation in Illinois limiting it to

1 less than major source threshold?

2 A. Correct. Yes.

3 Q. Same type of permit limitation that  
4 has been issued to the sources who got adjusted  
5 standards?

6 A. Correct.

7 Q. Following the submittal of that  
8 construction application, did you complete and were  
9 they submitted seasonal emission reports to the  
10 Illinois Environmental Protection Agency?

11 A. Yes.

12 Q. I draw your attention to Exhibit 24.

13 A. Yes.

14 Q. And is this the letter to Illinois EPA  
15 that submits the seasonal emission reports for 2000  
16 through 2002?

17 A. Yes.

18 Q. Based on those seasonal emission  
19 reports, do you have an opinion as to whether or not  
20 Packaging Personified triggered the ERMS program?

21 A. They did -- my opinion is they did  
22 trigger the ERMS program for those years.

23 Q. Did you conduct a stack test regarding  
24 the thermal oxidizer that was installed pursuant to

1 the construction permit?

2 A. I was present when that stack test was  
3 conducted by ARI Environmental.

4 Q. And you arranged and advised Packaging  
5 Personified to hire ARI and assisted them with the  
6 stack test?

7 A. That is correct.

8 Q. And I draw your attention to  
9 Exhibit 28.

10 A. Yes.

11 Q. Is that a copy of the stack test?

12 A. Yes, it is.

13 Q. And what's -- and did they pass the  
14 stack test?

15 A. They did.

16 Q. And it's your understanding Illinois  
17 EPA accepted that stack test?

18 A. Yes.

19 Q. Why did Packaging Personified not  
20 conduct a full-blown stack test of press five  
21 following the shutdown of press four in December  
22 of 2002?

23 A. Well, in the context of where we were  
24 with settlement negotiations with the State and

1 determining our options for compliance, it didn't  
2 make sense.

3                   If we were going to rely on the  
4 existing capture and control system on five at the  
5 time, then it would make sense to do a full-blown  
6 compliance test. But if we were going to do  
7 something else with five, such as we subsequently  
8 did, it made no sense to go through the time and  
9 considerable expense of doing a test that would be a  
10 moot point in a very short period of time.

11           Q.       During that time period did anyone at  
12 Illinois Environmental Protection Agency raise the  
13 issue of performing a complete stack test on press  
14 five?

15           A.       No. The interest of the Agency at  
16 that time was to know what our emissions were or,  
17 you know, historically had been and what they are  
18 were at the time. And that's the information that  
19 we developed for them.

20           Q.       And was the -- were the results of the  
21 engineering evaluation used to prepare your analysis  
22 of NSR that had been submitted to the Agency?

23           A.       Yes.

24           Q.       And were they used in terms of the



1 emissions information in the construction permit  
2 application?

3 A. Yes.

4 Q. And the Agency relied on that or at  
5 least accepted it as shown by issuance of the  
6 construction permit?

7 A. Yes.

8 Q. Following the issuance of the  
9 construction permit -- excuse me, following  
10 completion of construction and submittal of the  
11 stack test report, did you submit a revision to the  
12 CAAPP application requesting a federally enforceable  
13 state operating permit?

14 A. Yes.

15 Q. Look at Exhibit 33, please. Tell me  
16 what that document is.

17 A. This is a revision to a response for  
18 violation notice that I prepared and sent to Yasmine  
19 Keppner at Illinois EPA.

20 Q. Do you recall when you submitted the  
21 FESOP application first?

22 A. Yes. That's what you were looking at.  
23 That's actually 34. And that application is dated  
24 August 30th, 2004.

1           Q.       So Exhibit 33 is a letter that went in  
2 the same day as the FESOP application, which is  
3 Exhibit 34?

4           A.       Yes.

5           Q.       Has the Agency taken any final action  
6 with respect to either the CAAPP permit that was  
7 submitted in 2002 or this FESOP application that  
8 you're aware of?

9           A.       Not that I'm aware of.

10          Q.       Why did you submit a revision request  
11 to the construction permit?

12          A.       To the construction permit? The  
13 solvent or the ink use rates that we had estimated,  
14 which become limitations in the permit, were not  
15 sufficient. It was not a substantive emission issue  
16 because the destruction efficiency of the oxidizer  
17 was such that we could still live with the emission  
18 limits. We couldn't use with the solvent -- we  
19 couldn't live with the solvent ink use limits, so we  
20 requested to change those.

21          Q.       So you would increase the allowable  
22 amount of solvent ink usage but still live within  
23 the 25 tons?

24          A.       That is correct.

1 Q. Is that a standard type problem and a  
2 solution that you've encountered for a number of  
3 sources?

4 A. Happens all the time in the printing  
5 industry and the coating industry yes.

6 Q. And the Agency typically revises the  
7 construction permit?

8 A. Yes.

9 Q. And you provided the Agency with  
10 additional correspondence and information regarding  
11 the violation notice and the construction permit --

12 A. Yes.

13 Q. -- modification request?

14 A. Yes.

15 Q. And that would be -- those would be  
16 found at Exhibits 35 and 36?

17 A. Yes.

18 Q. Did the Agency during that time period  
19 grant the requested construction permit  
20 modification?

21 A. The modification, yes.

22 Q. Did you ask for -- again ask for the  
23 revision of the construction permit in the FESOP in  
24 February of 2006, if you recall?

1 A. Yes, I did.

2 Q. And is that found at Exhibit 39?

3 A. Yes.

4 Q. And is that the first revision to the  
5 construction permit that you're aware of? Did that  
6 one lead to the first revision, if it refreshes your  
7 memory?

8 MR. GRANT: It's an operating permit.  
9 Is that what you meant? Did you mean  
10 construction?

11 MR. HARSCH: Construction. Perhaps I  
12 will withdraw the question.

13 BY MR. HARSCH:

14 Q. Please look at Exhibit 42 and tell me  
15 what that is.

16 A. Okay. Yes. That is the revision I  
17 talked about to change the solvent ink use limits,  
18 so that was the first request for that revision.

19 Q. Again, does that construction permit  
20 contain any limitation on total VOC emissions?

21 A. It does.

22 Q. The same 25-ton limitation?

23 A. Yes.

24 Q. And you've reviewed Exhibit 40, which

1 are the calculation sheet, and Exhibit 41, have you  
2 not?

3 A. Yes, I have.

4 Q. And do those indicate your opinion  
5 that the Agency accepts that Packaging has a  
6 limitation limiting less than a major source  
7 threshold?

8 A. Yes, they do.

9 Q. In Exhibit 39 did you again ask the  
10 Agency to issue a FESOP application?

11 A. Yes, I did.

12 Q. Has there been any formal action with  
13 respect to the application for a FESOP?

14 A. The only action that I'm aware of is a  
15 request for additional information that came a few  
16 weeks ago.

17 Q. And please look at Exhibit 48.

18 A. Yes.

19 Q. Is that the request for additional  
20 information?

21 A. It is.

22 Q. On behalf of Packaging, did you  
23 respond to that?

24 A. Yes, I did.

1 Q. And if I can draw your attention to  
2 what is Exhibit 49.

3 A. Yes.

4 Q. What is Exhibit 49?

5 A. That is my response dated May 13th,  
6 2009, to the request for additional information on  
7 behalf of Packaging.

8 Q. There has been no action as of a month  
9 and a half ago in response to that that you're aware  
10 of?

11 A. None.

12 Q. And that would be typical?

13 A. Yes.

14 MR. HARSCH: I would move for the  
15 admission of Exhibits 48 and 49 as showing  
16 Packaging's continued efforts trying to get  
17 an operating permit.

18 MR. GRANT: We have no objection to  
19 the admission, although, the editorial  
20 comment afterward we don't agree with. But  
21 no objection.

22 HEARING OFFICER HALLORAN: So noted.  
23 Respondent's Exhibits 48 and 49 are admitted.

24

1 BY MR. HARSCH:

2 Q. The first request for a CAAPP  
3 application was in 2002?

4 A. Correct.

5 Q. There have been FESOP applications  
6 submitted in the interim?

7 A. Correct.

8 Q. And now the permit is -- you've  
9 responded with additional information to the Agency  
10 recently?

11 A. Correct.

12 Q. Is this time frame -- can you  
13 characterize this time frame based on your  
14 experience in permitting other sources?

15 MR. GRANT: I'm going to object at  
16 this point just on the basis of relevance.  
17 We're talking about actions in 2009.

18 HEARING OFFICER HALLORAN: Tammi,  
19 could you read the question back, please?

20 (Whereupon, the requested  
21 portion of the record  
22 was read accordingly.)

23 HEARING OFFICER HALLORAN: Mr. Harsch.

24 MR. HARSCH: I think it's relevant.

1 One of the allegations is not having  
2 appropriate permits. The applications have  
3 been pending a long period of time.

4 MR. GRANT: The CAAPP permit  
5 application -- they haven't applied for a  
6 CAAPP permit application, that was in the  
7 complaint. That was done in 2002, so that  
8 non-compliance period.

9 The operating permits for the  
10 presses, I think that's pretty much conceded  
11 that they weren't -- that they didn't have a  
12 construction or operating permit for the  
13 emission source that we've alleged is  
14 non-compliant. I believe that's pretty much  
15 the case.

16 HEARING OFFICER HALLORAN: The Board  
17 will note your objection.

18 MR. GRANT: Okay.

19 HEARING OFFICER HALLORAN: They'll  
20 weigh it accordingly. Objection overruled.

21 BY THE WITNESS:

22 A. Not acting on the permit for a period  
23 of seven years is, in my experience, a remarkably  
24 long time frame. And the items that are in the



1 request for additional information, some are  
2 information that the Agency was not privy to but the  
3 majority of these items are items that are either  
4 irrelevant or that the Agency had in the original  
5 CAAPP application and the subsequent FESOP  
6 application.

7 MR. GRANT: I'm going to object again  
8 because I think now he's getting into a  
9 permit appeal type of issue. That's a  
10 separate matter. It's not an enforcement  
11 case.

12 HEARING OFFICER HALLORAN: Mr. Harsch.

13 MR. HARSCH: We've submitted responses  
14 without a final action. The witness has, I  
15 think, properly characterized his view of  
16 what's transpired.

17 HEARING OFFICER HALLORAN: Objection  
18 overruled. Let's wrap it up, Mr. Harsch.  
19 Thanks.

20 BY MR. HARSCH:

21 Q. Did you prepare an expert report in  
22 this proceeding?

23 A. I did.

24 Q. And is Exhibit 2 a copy of your expert

1 report?

2 A. I'm sorry, what was the question?

3 Q. Well, did you initially prepare an  
4 expert report dated February 3, 2009, which is found  
5 in Exhibit 2?

6 A. Yes.

7 Q. And did you subsequently provide us  
8 with a revised expert report correcting some dates?

9 A. Yes, I did.

10 Q. And is that found at Exhibit 55?

11 A. Yes, it is.

12 Q. Essentially, the expert report  
13 summarizes what you just testified to and the  
14 efforts that you made on behalf of Packaging?

15 A. Yes.

16 Q. Did you provide Navigant with  
17 information concerning cost of a used thermal  
18 oxidizer?

19 A. I did.

20 Q. And would that be a thermal oxidizer  
21 for just press four?

22 A. That is correct.

23 Q. And did you also develop operating  
24 costs for that used oxidizer?

1 A. I did.

2 Q. And how did you develop those  
3 operating costs?

4 A. I used standard US EPA methodology,  
5 cost control spreadsheets, which overestimate  
6 compared to what is actual costs based on capital,  
7 labor, natural gas use, electricity and other  
8 standard factors.

9 Q. I draw your attention to Exhibit 43.

10 A. I'm there.

11 Q. Is this the letter you sent -- that  
12 was sent to Navigant that provides your cost  
13 estimates and attached spreadsheet?

14 A. Yes.

15 Q. Do you agree with the testimony  
16 yesterday regarding the -- strike that.

17 You were here yesterday when  
18 Mr. Styzens objected to this information as being  
19 unsupported, that he couldn't follow it?

20 A. Yes.

21 Q. Do you believe that to be the case?

22 A. I have no difficulty following it. I  
23 don't know why anyone else would.

24 Q. Do you think these are reasonable

1 estimates, conservative estimates of what the cost  
2 of operating a control device for just press four  
3 would have been?

4 A. Yeah, they're conservative, on the  
5 high side. The actual costs would have been lower  
6 than this.

7 Q. And why is that?

8 A. The biggest impact to the cost of  
9 operation is the natural gas use. The cost control  
10 spreadsheets that EPA has assume that those burners  
11 are running at max load throughout the entire  
12 operating time.

13 As Joseph Imburgia explained  
14 yesterday when talking about a regenerative thermal  
15 oxidizer, in the printing industry with the solvent  
16 loads that they deliver, that's just not the case.

17 Burners on regenerative thermal  
18 oxidizers have what's called a turndown, typically  
19 20 to 1 and sometimes as high as 40 to 1, which says  
20 how much below the max load you can run. So if it's  
21 20 to 1 turndown, for example, it can run at 120th  
22 of its max. That's essentially pilot.

23 So if you want a real estimate of  
24 O&M on a regenerative, what it's really going to be,

1 a real-world as opposed to EPA methodology on a  
2 regen is probably going to be 5 percent or less of  
3 what is estimated based on max load, if that all  
4 makes sense.

5 Q. You've reviewed the cost estimations  
6 for the economic benefit performed by Mr. Styzens?

7 A. Yes.

8 Q. And with regard to the thermal  
9 oxidizer that Packaging did install, do you think  
10 that the \$86,000 annual operating costs are  
11 reasonable?

12 A. I think they're completely  
13 unreasonable and ridiculously high.

14 Q. Do you know the BTU or gas usage  
15 maximum rate of that thermal oxidizer?

16 A. It's a 2.5 million BTU an hour burner.

17 Q. And if you used a standard gas cost,  
18 what number would that be?

19 A. You know, it varies over the year, but  
20 I think four cents a therm would be a reasonable  
21 number to use.

22 Q. For just gas usage then on a maximum  
23 firing rate, what would that equate to?

24 A. If they were maximum running

1 8760 hours per year, it would be roughly in the  
2 neighborhood of \$85,000.

3 Q. With respect to the turndown, how long  
4 would you expect it to operate at that rate?

5 A. The only time that they would actually  
6 fire at that rate would be on start-up when they're  
7 heating it up, which would be a very short period of  
8 time. So it would operate on maximum turn down, you  
9 know, 95 percent of the year.

10 Q. And if you applied that in your head,  
11 can you apply that to that figure?

12 A. So a twentieth of 85,000 is going to  
13 be, you know, somewhere in the neighborhood of take  
14 a little -- about 5,000 a year or so. I don't think  
15 you'd see it on the gas bill.

16 Q. So that would be consistent with what  
17 was testified to yesterday that they really didn't  
18 notice any difference?

19 A. That would be consistent, yes.

20 Q. You were here yesterday when  
21 Mr. Styzens said that he relied on information  
22 regarding actual operating costs for one of the --  
23 for a similar control device?

24 A. Yes.

1 Q. Are you familiar with that source?

2 A. If we're talking about Formel, yes, I  
3 am.

4 Q. Turn to Exhibit 67.

5 A. Okay.

6 Q. The second page.

7 A. Yes.

8 Q. Are you familiar with this document?

9 A. I am. I prepared it.

10 Q. You were the -- so you prepared cost  
11 estimate that Mr. Styzens relied upon?

12 A. That is correct.

13 Q. And where does this document come  
14 from?

15 A. It was a part of a supporting  
16 technical document that I submitted as part of the  
17 adjusted standard proceedings for Bema, Formel and  
18 Vonco.

19 Q. And how did you prepare this document?

20 A. The methodology I just described with  
21 the EPA cost control spreadsheets were used to  
22 develop this, as well. It was an estimate based  
23 on -- the methodology, the cost control spreadsheets  
24 that they used for RACT and BACT analyses at the

1 time has since been replaced by a program called Air  
2 Compliance Advisor, but at the time this was the  
3 standard.

4 Q. And you prepared similar cost  
5 estimates for the other --

6 A. I did.

7 Q. -- participants in the adjusted  
8 standards?

9 A. That is correct.

10 Q. And were those cost estimates and the  
11 supporting documentation discussed with  
12 Mr. Bloomberg?

13 A. Yes. He was a lead Agency participant  
14 in those discussions.

15 Q. And did he approve those estimates?

16 A. Yes.

17 Q. At the time of the adjusted standard,  
18 had Formel constructed a control device?

19 A. They had not.

20 Q. So this is, in fact, an estimate or a  
21 future estimate, it's not actual cost?

22 A. It's not actual cost because, yeah, it  
23 doesn't reflect a device that existed at the time  
24 and, again, the EPA methodology that you use for



1 RACT and BACT purposes is much higher -- delivers  
2 much higher costs than the real world.

3 Q. And are you aware of -- do you  
4 remember any discussions with Mr. Bloomberg and  
5 others regarding that fact?

6 A. Yes. We had that discussion on  
7 several occasions during adjusted standard.

8 Q. And is that the -- you were shown  
9 testimony in your earlier examination by Mr. Grant  
10 that you submitted into the proceeding and were  
11 asked questions regarding calculations, were you  
12 not?

13 A. Yes.

14 Q. Do you believe you made it clear in  
15 your testimony that this spreadsheet was based using  
16 EPA methods?

17 A. My recollection is that I did, yes.

18 MR. HARSCH: Off the record for a  
19 second.

20 HEARING OFFICER HALLORAN: We're off  
21 the record.

22 (Brief pause.)

23 HEARING OFFICER HALLORAN: Back on the  
24 record.

1 BY MR. HARSCH:

2 Q. I believe you were asked could you  
3 briefly explain the cost of those options. Would  
4 you read your answer?

5 A. We analyzed the costs based on the  
6 amount of VOC controlled and the cost to control  
7 using EPA methodology, which ourselves and the State  
8 of Illinois worked together to develop what would be  
9 the correct control cost.

10 For a recuperative thermal  
11 oxidizer, we came out with a control cost of \$18,041  
12 per ton control and for a regenerative thermal  
13 oxidizer we came out with a control cost of \$10,911  
14 per ton.

15 Q. I believe you testified -- I just want  
16 to make it clear that US EPA has a methodology for  
17 how you correct -- how you calculate a control cost?

18 A. Yes.

19 Q. Is the purpose of that methodology so  
20 that the costs that we used when the rules were  
21 developed or the threshold was developed, a certain  
22 dollar per ton you have to control at a certain --  
23 under that and over that you don't have to?

24 A. Yes. It is to develop the annualized

1 cost to control so that can be divided by the tons  
2 controlled. And in a RACT or BACT context, you can  
3 determine the cost of control.

4 Q. And that's well-known and accepted as  
5 part of the regulatory development?

6 A. In every federal and state rulemaking  
7 I've been involved in, it is, yes.

8 Q. So at the time you presented this  
9 testimony, Formel did not have an RTO installed?

10 A. They had no control device.

11 Q. Are you familiar with whether or not  
12 Formel has, in fact, ever installed an RTO unit?

13 A. They did not.

14 Q. How do you know that?

15 A. I examined their permits as part of my  
16 preparation for this hearing and, also, I had some  
17 experience with the them after. But they installed  
18 a catalytic thermal oxidizer.

19 Q. I believe there was testimony by  
20 Mr. Styzens that he had been provided another  
21 benchmark that were costs from Argus?

22 A. Argus Plastics, yes.

23 Q. Are you familiar with Argus Plastics?

24 A. They are not a client, but I know of

1 their operation and I've reviewed their permits.

2 Q. And can you -- did Argus, to the best  
3 of your review, ever install an RTO unit?

4 A. No.

5 Q. And how do you know that?

6 A. A review of their permits available at  
7 the EPA website shows that they have 17 uncontrolled  
8 presses at their current location in Wheeling and  
9 that they had 17 -- or the number may have been  
10 different, but a number of uncontrolled presses at  
11 their former location in Des Plaines.

12 Q. And they were subject to an  
13 enforcement action?

14 A. They were.

15 Q. And that enforcement action was  
16 settled on the basis that they had moved and were in  
17 compliance?

18 A. Yeah. They were granted a new permit  
19 and allowed to take advantage of the hundred ton per  
20 year new major source threshold and then the new  
21 permit does not provide for any control.

22 Q. So is it your understanding then that  
23 the benchmarks provided by Mr. Bloomberg to  
24 Mr. Styzens were not, in fact, actual costs?

1           A.       No, they're definitely not actual  
2 costs.

3           Q.       Based on your familiarity with  
4 flexographic printing, do you agree with the  
5 testimony from yesterday that an RTO unit is not a  
6 significant electrical user?

7           A.       Yes.

8           Q.       And with respect to Packaging, can you  
9 expound on that?

10          A.       The blower on the unit is the only  
11 significant electrical load. Typically -- and I  
12 believe this is the case with Packaging -- it's also  
13 a variable speed drive, which means that the already  
14 low draw is varied with requirements depending on  
15 how many presses they're running, how hard they're  
16 running it.

17                   A blower on that size unit I would  
18 estimate is probably somewhere in the neighborhood  
19 of ten horsepower. A ten horsepower motor run full  
20 out, which it wouldn't be all year, might generate a  
21 total electrical draw of -- I don't know, if they're  
22 paying like eight cents a kilowatt, probably a  
23 little lower, but it's somewhere around \$500 a year.  
24 It'd be a blip on the radar.

1 Q. There was testimony yesterday  
2 regarding the amount of maintenance required of the  
3 RTO unit. Base on your experience and RTO units in  
4 general used in the flexographic printing industry,  
5 do you agree with that?

6 A. I do. I do. RTOs, specifically, are  
7 very low maintenance items.

8 Q. And the one specifically that was  
9 installed at Packaging?

10 A. Yes.

11 Q. Has Packaging requested that -- you're  
12 currently employed at Mostardi Platt?

13 A. That is correct.

14 Q. Has Packaging requested that Mostardi  
15 Platt provide assistance in submitting some missing  
16 seasonal emission reports and establishment of an  
17 account officer and taking other necessary steps to  
18 take care of the past ATUs?

19 A. Yes.

20 Q. And what has happened as a result of  
21 that?

22 A. Well, when we were informed that this  
23 issue was out there and, of course, when the  
24 oxidizer -- the current oxidizer was first

1 installed, we didn't have an operating permit, we  
2 didn't have a CAAPP permit, which would be the  
3 instrument to administer the ERMS account. And then  
4 when the oxidizer was installed, of course, then the  
5 emissions were going forward under ten tons per  
6 season.

7                   So I think Tim picked it up in --  
8 Tim Piper picked it up in '05, as he described,  
9 where he kept submitting reports. I think there was  
10 some confusion in my mind specifically whether that  
11 was necessary, but I think -- and in retrospect, Tim  
12 did the right thing.

13                   So we still had this '03 and '04  
14 hole, plus we never had -- because of the permit  
15 situation and inaction on the permit, we never had  
16 the opportunity to apply -- the mechanism to apply  
17 inaction.

18                   When this came up, Tim did and I  
19 reviewed the '03 and '04 seasonal emission reports.  
20 We have an account officer at Huff & Huff -- I'm  
21 sorry, at Mostardi Platt. I should check my  
22 business card before I walk in.

23                   Tim Kinsley, who is a registered  
24 account officer, we did the necessary paperwork for

1 him to be an authorized representative of Packaging  
2 Personified. We submitted the documentation to get  
3 the transaction going, although we did not claim any  
4 baseline.

5 And as far as I know -- it was a  
6 little unusual situation because there's not a CAAPP  
7 permit for the ERMS -- we're up to date.

8 Q. And, essentially, waiting to hear from  
9 IEPA how to square the account, purchase the units?

10 A. That is correct.

11 Q. And I draw your attention to what I  
12 think has been admitted as Exhibit 50.

13 MS. WHEELER: It has been.

14 THE WITNESS: Yes.

15 BY MR. HARSCH:

16 Q. Is that the document you're referring  
17 to?

18 A. It is. That's the one.

19 Q. And, again, since it had been a  
20 month-and-a-half ago, it would not be unusual not to  
21 have a response?

22 A. Correct.

23 MR. HARSCH: Mr. Hearing Officer, I  
24 did not mark it down. Did we get into



1 evidence Exhibit 48?

2 MS. WHEELER: Yes.

3 HEARING OFFICER HALLORAN: Exhibits 48  
4 and 49, the exhibit you just mentioned you  
5 said something about submitted, I don't have  
6 anything down for that.

7 MR. HARSCH: I'm sorry?

8 HEARING OFFICER HALLORAN: I assume  
9 you meant submitted into evidence?

10 MR. HARSCH: Yes.

11 HEARING OFFICER HALLORAN: I don't  
12 have it being offered or accepted.

13 MR. HARSCH: At this point I would,  
14 just to make sure, 48 and 49 I think have  
15 been. Exhibit 50 I think --

16 MS. WHEELER: We have no objection.

17 HEARING OFFICER HALLORAN: Okay.  
18 Exhibit 50 is admitted. Thank you.

19 MR. HARSCH: I need a very short break  
20 to make sure that I'm done.

21 HEARING OFFICER HALLORAN: I was going  
22 to give you a break anyway, Mr. Grant. Are  
23 you going to do the cross?

24 MR. GRANT: Yeah.

1 MR. HARSCH: I just need to make sure  
2 that I'm through.

3 HEARING OFFICER HALLORAN: Let's be  
4 back here at 10:40, please.

5 (Whereupon, after a short  
6 break was had, the  
7 following proceedings  
8 were held accordingly.)

9 HEARING OFFICER HALLORAN: We're back  
10 on the record.

11 BY MR. HARSCH:

12 Q. Mr. Trzupsek, you stated that you went  
13 online and looked at the Agency permit files?

14 A. Yes, I did.

15 Q. Please identify these three documents.

16 A. The first is a Clean Air Act permit  
17 program permit for Argus Plastics dated February 10,  
18 2000. The second is a federally enforceable state  
19 operating permit for Argus Plastics dated May 7,  
20 2008. And the last is a federally enforceable state  
21 operating permit for Formel industries, Inc., dated  
22 August 23rd, 2005.

23 Q. And where did you obtain those  
24 documents?

1           A.       From the US EPA Region 5 permit  
2 database for Illinois.

3           Q.       And do you rely on that database for  
4 looking up permits as part of your consulting  
5 business?

6           A.       Yes, I do.

7           Q.       Do you find the documents in that to  
8 be reliable?

9           A.       Yes, I do.

10          Q.       Does Illinois EPA operate a similar  
11 database?

12          A.       To my knowledge, Illinois EPA has an  
13 internal database, but they also use the Region 5  
14 system, as well.

15          Q.       That's true and accurate copies of the  
16 print-offs that you made?

17          A.       Yes, they are.

18                 MR. HARSCH: At this point in time,  
19 Mr. Hearing Officer, I move that as Group  
20 Exhibit 58. I only have the one copy.

21                 MR. GRANT: I would like to see them.  
22 What are these again?

23                 MS. WHEELER: Permits for unrelated  
24 companies.

1           MR. GRANT: I object. There's no  
2           relevance to this. I mean, what does a  
3           permit for Argus have to do with  
4           (inaudible) --

5           HEARING OFFICER HALLORAN: Mr. Grant,  
6           speak up.

7           MR. GRANT: We object on the basis of  
8           relevance. These are permits for unrelated  
9           people.

10          HEARING OFFICER HALLORAN: For who?

11          MR. GRANT: For totally unrelated --  
12          well, they're not -- there's one for Formel,  
13          a permit. I have no idea what the relevant  
14          purpose is. There's one for Argus Plastics  
15          in Wheeling.

16                        They're permits granted by  
17          Illinois EPA to other entities. I just don't  
18          understand how this can be relevant.

19          HEARING OFFICER HALLORAN: I think --  
20          your objection is noted. I think that's  
21          somewhat what the latest Board ruling was  
22          about. They didn't rule on any kind of  
23          relevancy, just the burdensome nature,  
24          correct?

1 MR. GRANT: Yeah. That's true.

2 HEARING OFFICER HALLORAN: Okay. So I  
3 do find it somewhat relevant and the Board  
4 will weigh it accordingly.

5 MR. HARSCH: May I respond?

6 HEARING OFFICER HALLORAN: For the  
7 record, yes, you may.

8 MR. HARSCH: I think it is clear from  
9 the testimony of Mr. Styzens that he relied  
10 on benchmarks which he characterized as  
11 actual operating data that he got from  
12 Mr. Bloomberg.

13 And today Mr. Trzupsek has  
14 testified regarding the fact that those are  
15 not actual operating data. These sources  
16 have not installed the type of control  
17 that -- an RTO unit. And, also, frankly,  
18 these documents are readily available to  
19 anyone who does the -- who looks to see if  
20 these sources exist and have an RTO unit.

21 MR. GRANT: First off, we disclosed  
22 our exhibits a long time ago and we keep  
23 getting these things thrown in.

24 HEARING OFFICER HALLORAN: I agree.

1 This case is, what, nine years old,  
2 Mr. Harsch?

3 MR. HARSCH: Yes.

4 HEARING OFFICER HALLORAN: Go ahead,  
5 Mr. Grant.

6 MR. GRANT: The cost -- the facts are  
7 that Formel installed a CRO, I think, or it  
8 was a catalytic device. Now this cost  
9 information is for exactly what was developed  
10 and was testified to in the adjusted hearing  
11 by Mr. Trzupsek is exactly Packaging  
12 Personified installed. This is information  
13 for essentially the same engineering type of  
14 device.

15 This is a permit for a totally  
16 different device. But this -- so this was --  
17 this came from Formel in their adjusted  
18 standard petition. But the costs are  
19 directly relevant to what was installed at  
20 Packing Personified.

21 So why we want to put a permit in  
22 for a different control device, which I think  
23 we've had testimony here that nobody likes  
24 that catalytic device, nobody seemed to

1 think that it very efficient, it was more  
2 expensive and that sort of thing.

3 Combined with coming in this late  
4 in the game, I just don't see why we have to  
5 have additional exhibits that we haven't had  
6 a chance to take a look at thrown at us. I  
7 don't understand the relevant purpose.

8 HEARING OFFICER HALLORAN: Mr. Harsch,  
9 why was this revealed so late in the game?

10 MR. HARSCH: Yesterday was the  
11 testimony of the witness that he relied on  
12 actual cost data and this is a document that  
13 has been prepared in response -- and being  
14 offered in response to that testimony.

15 It's the first time we were aware  
16 that it was characterized as actual cost  
17 data, Mr. Hearing Officer. It came up in the  
18 testimony yesterday.

19 MR. GRANT: We have the -- that data  
20 is in evidence.

21 HEARING OFFICER HALLORAN: You know  
22 what, your objection are noted on the record.  
23 I'm going to allow it. The Board will weigh  
24 it accordingly. Respondent's Group

1 Exhibit 58 is admitted.

2 MR. HARSCH: Thank you.

3 HEARING OFFICER HALLORAN: Is that it,  
4 Mr. Harsch?

5 MR. HARSCH: Yes. Thank you.

6 HEARING OFFICER HALLORAN: Thank you.

7 Mr. Grant, cross.

8 CROSS EXAMINATION

9 BY MR. GRANT:

10 Q. Mr. Trzupsek, you stated that Packaging  
11 Personified was not aware of the flexographic VOM  
12 control rules until Illinois EPA visited their  
13 facility in 2001, correct?

14 A. That's my understanding, yes.

15 Q. These rules were -- had been actually  
16 promulgated in 1993?

17 A. I'll accept that.

18 Q. How is it that Packaging -- well, let  
19 me ask, Packaging Personified, as printers go, is a  
20 fairly large company, isn't it?

21 A. I wouldn't characterize them as fairly  
22 large, no.

23 Q. Did you hear yesterday the testimony  
24 that they have 100 employees just in Carol Stream?



1           A.       I did.

2           Q.       And doesn't Formel, at least at the  
3 time that they were doing their adjusted standard  
4 petition, that they only had 30 employees?

5           A.       I'm not aware how many employees  
6 Formel had.

7           Q.       How is it that a printer operating in  
8 an ozone non-attainment area with significant VOM  
9 emissions at least from press four was totally  
10 unaware for a period of seven or eight years of the  
11 only major regulation that applied to them?

12          A.       Well, I wouldn't say it's the only  
13 major regulation that applies to them, but in my  
14 experience it's not unusual in certainly the number  
15 of cases that come before the Board for people with  
16 unpermitted sources. The regulatory world is so  
17 complex and so full of regulations of all types that  
18 I don't find it unusual, at least in my business,  
19 that people are unaware.

20          Q.       What are the other major regulations  
21 that apply to Packaging Personified, environmental  
22 regulations?

23          A.       They are subject to the hazardous  
24 waste regulations and report and have reported as a

1 large quantity generator. They are subject to EPCRA  
2 Form R, if that's a requirement. Tier II, if they  
3 should trigger that. They're subject to storm water  
4 regulations, which they have looked at. They're  
5 subject to SWPPP, storm water pollution prevention  
6 plan, which I know they've dealt with. They're  
7 subject to the SPCC plans for hydraulic fluid and  
8 oil storage. And, as Tim testified, they deal with  
9 indoor worker safety issues and OSHA and all that,  
10 that sort of thing, as well. That's just off the  
11 top of my head.

12 Q. You heard yesterday that at least  
13 Mr. Piper believed that they had been in compliance  
14 with hazardous waste regulations during the 1990s,  
15 correct?

16 A. Yes.

17 Q. How did they find out about those  
18 regulations?

19 A. I do not know.

20 Q. And they're fairly complicated  
21 regulations, aren't they? Would you agree that  
22 hazardous waste management is a fairly complicated  
23 regulatory area?

24 A. I don't know that there's not an

1 uncomplicated one. But, yes, it is a complicated  
2 one.

3 Q. But you don't know how they learned of  
4 those regulations?

5 A. I do not.

6 Q. You testified that you had been  
7 working with the printing industry on really these  
8 flexographic printing VOM rules. I'll call them the  
9 flexo rules. And when I say flexo rules, I'm  
10 talking about 218.401. Other printing companies  
11 you've been working with who were not in compliance  
12 with those, correct?

13 A. That we got into compliance with and  
14 some were in compliance already, yes.

15 Q. So they were aware that there was a  
16 need to come into compliance with these?

17 A. Are we talking about the adjusted  
18 standard companies?

19 Q. No. Well, I guess -- I don't know if  
20 your involvement was limited to just those three  
21 companies. You mentioned that you worked in a  
22 number of printing situations?

23 A. Yeah. And some of them were aware  
24 beforehand, like flexo printers who printed on

1 different substrates could comply and did comply  
2 through the use of compliant inks and then you had  
3 this subset of that group who printed on  
4 polyethylene that could not.

5 Q. And I think you heard Mr. Bloomberg's  
6 testimony yesterday when he said that they were  
7 originally contacted by at least some printers  
8 regarding confusion or inability to comply prior to  
9 sending out that letter in 1997; do you recall that?

10 A. I will accept that. I didn't know  
11 they were contacted prior to the letter, but I'll  
12 accept that if you say.

13 Q. Of the companies that you worked with,  
14 how many were aware -- let's limit that to the  
15 adjusted standard companies.

16 How many of the three companies,  
17 the adjusted standard companies, how many of them  
18 were aware before that 1997 letter went out that  
19 these rules applied to them?

20 A. I do not know.

21 Q. You would agree, I assume, that  
22 Illinois EPA is not required under the Act and  
23 regulations to send letters out to people to advise  
24 them of their compliance, correct?

1           A.       I don't know EPA's legal obligations.

2           Q.       But isn't it -- as somebody in the  
3 regulating community, isn't it their obligation to  
4 determine what the law is and find out their  
5 compliance status?

6           A.       I understand ignorance of law is no  
7 excuse.

8           Q.       I'm going to ask you about the  
9 compliance testing that you did on -- I'm not going  
10 to use the compliance testing. I think you said  
11 engineering estimate of the emissions on press  
12 number five?

13          A.       Yes.

14          Q.       At one point you stated that -- to the  
15 effect that it wouldn't have made any sense to do a  
16 stack test on press number five and I believe that  
17 was because of the plan to install the RTO, correct?

18          A.       A formal compliance -- I said it  
19 didn't make sense to do a formal compliance stack  
20 test until we knew how we were going to comply.  
21 That was -- that decision in terms of the hierarchy  
22 of decisions whether to do the formal compliance  
23 test or not depended on what our compliance options  
24 were going to be. If we were going to leave five

1 stand alone, then we would have done a formal  
2 compliance test.

3 Q. But a formal compliance test was never  
4 done on press five?

5 A. That is correct.

6 Q. Now wouldn't a formal compliance test  
7 have been able to prove that you had been in  
8 compliance prior to that?

9 A. It would have.

10 Q. I mean, right now you're attempting to  
11 justify press five having been compliant solely on  
12 the basis of an engineering estimate?

13 A. As I have in other cases yes.

14 Q. And if you had, in fact, done that  
15 engineering estimate or if you had, in fact, done a  
16 full stack test on press five, you now would be  
17 certain that, say, from 1997 to 2001 or 2002 that it  
18 actually was a compliant press?

19 A. I would be as certain as I am certain  
20 about what I did.

21 Q. Okay. Now what you talk about as  
22 being a formal test, in fact, that's actually  
23 required in the regulations, isn't it?

24 A. I don't know that it's required in the

1 regulations. I know it's required by permit when  
2 the permit writer chooses.

3 Q. Are you saying that the 218.401  
4 regulations that those control -- if you're going to  
5 use the control option, which, in fact, is what you  
6 did here?

7 A. Yes.

8 Q. Are you saying that it's an option to  
9 demonstrate control in accordance with the  
10 regulation?

11 A. If we're talking about 401  
12 specifically, then I would agree with you, 401 does  
13 say that you have to test if you use a control  
14 device. You characterized that as a regulation.

15 Q. Yes. And I'm not sure if it refers to  
16 another Section in the 218 regulation, but it  
17 specifies specifically for people who use that, the  
18 control option, it specifies specifically what tests  
19 they have to do?

20 A. For flexographic printers, it gives  
21 you actually a choice of three tests that you do to  
22 show control device emissions.

23 Q. Right. And none of those three tests  
24 were done until the RTO was installed, correct?

1           A.       No. But the 25A was performed.

2           Q.       The 25A was performed, but it wasn't  
3 performed in accordance with the regulations, that's  
4 accurate, isn't it, with the test requirements?

5           A.       We didn't do three one-hour stack  
6 tests, but the 25A was calibrated, operated and  
7 performed exactly as it would be.

8           Q.       But the test requires 3 one-hour  
9 tests, doesn't it?

10          A.       For compliance purposes, yes.

11          Q.       The test requires that you perform  
12 three one-hour tests; isn't that in the test  
13 protocol?

14          A.       In what test protocol?

15          Q.       In the 25A -- I guess what I'm -- and  
16 you know more about these than I do, so I'm asking  
17 you questions and you can correct me if I'm asking  
18 about the wrong test. But the test to demonstrate  
19 capture efficiency --

20          A.       Yes.

21          Q.       -- and the engineering estimate that  
22 you performed, you did not follow the test protocol  
23 as approved by either US EPA or Illinois EPA to  
24 demonstrate -- that was required to demonstrate



1 capture efficiency, correct?

2 A. I did not follow method 204 for  
3 capture efficiency.

4 Q. Which method that was fully approved  
5 by either US EPA or Illinois EPA did you completely  
6 comply with to demonstrate capture efficiency?

7 A. I followed, again, what I said, I  
8 followed method 25A, the way that it's operated. I  
9 did not do three one-hour tests. If you consider  
10 three one-hour tests to be complete compliance,  
11 that's not a judgment I'm going to make.

12 My judgment is I did 25A and  
13 followed the method exactly as written and  
14 determined destruction efficiency follow that  
15 method. I did not do three one-hour tests.

16 Q. And that would have been required to  
17 demonstrate compliance?

18 MR. HARSCH: I'll object to the  
19 question. We're getting into a lot of rules  
20 here. Perhaps Counsel can tell me -- tell  
21 the witness which rule he's referring to when  
22 he says it's required by the rule?

23 MR. GRANT: I'm asking is it required  
24 by the rule?

1 HEARING OFFICER HALLORAN: Objection  
2 overruled.

3 MR. GRANT: Give me just one second.

4 (Brief pause.)

5 BY MR. GRANT:

6 Q. Did you follow the procedure in  
7 218.105(f) to demonstrate capture efficiency?

8 A. Could I see it?

9 Q. Sure.

10 A. I used the method that's described. I  
11 did not follow the portion that says attached shall  
12 consist of three separate runs each lasting a  
13 minimum of 60 minutes unless the Agency and the  
14 US EPA determines proper variables dictates shorter  
15 sampling times.

16 Q. And prior to doing this engineering  
17 evaluation, you didn't notify Illinois EPA 30 days  
18 ahead of time; is that correct?

19 A. That is correct.

20 Q. And that's also required by the  
21 regulations for a compliance test, correct?

22 A. That is correct.

23 MR. HARSCH: Again, Mr. Grant, I'd  
24 like to object to that question. Again, you

1 had the -- you were able to show the witness  
2 the rule you were referring to and have  
3 him --

4 MR. GRANT: Well, I was prepared to.  
5 I'll show it to you to see if you disagree  
6 with me. This is 218.105(c)(f)(c),

7 MR. HARSCH: Thank you.

8 BY MR. GRANT:

9 Q. Asking about the CAAPP permit  
10 application, Packaging Personified was required to  
11 have a CAAPP permit at the time it submitted its  
12 application, correct?

13 A. In 2002, yeah, that is correct.

14 Q. Do you know when that requirement  
15 would have been triggered, what year?

16 A. I would have to review their emission  
17 history to see when they became -- when they crossed  
18 major source threshold.

19 Q. And I think you stated that it was  
20 subsequently deemed complete by Illinois EPA?

21 A. Yes.

22 Q. Now being deemed complete doesn't mean  
23 that a permit is granted?

24 A. Correct.

1 Q. It just means that the information --  
2 it wasn't missing any of the required information,  
3 correct?

4 A. That there was -- they can still  
5 request additional information even after  
6 completeness, but that the application had  
7 everything that it should have for them to begin  
8 working on it.

9 Q. It didn't mean that they accepted the  
10 numbers as they were prepared?

11 A. That is correct.

12 Q. And in the CAAPP application I think  
13 that you said that when you came to the facility in  
14 2001 that presses one and two were lightly used;  
15 is --

16 A. Yes.

17 Q. -- that correct?

18 Let me ask you to turn to the  
19 white binder. I'm looking for our CAAPP permit. I  
20 think our pages might be different.

21 A. It's nine, I think.

22 Q. Nine?

23 A. Yeah.

24 Q. And I'm looking for Page 2.1.

1 A. Okay.

2 Q. 2.1-2.

3 A. Yeah.

4 Q. And you can check this to make sure  
5 it's true, but I think this is the emissions  
6 information for the water-based presses one and two?

7 A. Well, the permit request information,  
8 yes.

9 Q. And on Page 2.1-2 it gives typical  
10 operating hours?

11 A. Yes.

12 Q. And it shows 16-hours per day,  
13 five days a week?

14 A. It does.

15 Q. I'm not trying to hammer you on this,  
16 but when you said lightly used, is that what you  
17 consider to be lightly used?

18 A. I would not consider that a reflection  
19 of actual use.

20 Q. Okay. It says typical operating?

21 A. It does.

22 Q. It also has maximum operating above  
23 it, correct?

24 A. Yes. And if I can explain, in the

1 permit world, and I'm not the only permit  
2 application who does this, the maximum operating  
3 hours defines what the Agency will allow you to  
4 operate that press at or any piece of equipment. So  
5 it becomes the -- it becomes an enforceable  
6 condition in your permit.

7                   So without exception, I advise  
8 every client, unless there's some overriding reason,  
9 to permit for maximum 24/7/52 because in that way  
10 they won't have to keep track of their operating  
11 hours.

12                   The typical operating hours become  
13 no operating condition and has absolutely no  
14 relevance expect for Agency planning purposes. So I  
15 will typically throw in a number that is somewhat  
16 less, but has absolutely no relevance to their  
17 actual operations.

18                   Q.       So what you're saying is the  
19 information in the permit application that their  
20 typical operating hours were 16 hours a day, five  
21 days a week is not correct?

22                   A.       I'm saying it's irrelevant. I don't  
23 know what their typical operating hours are.

24                   Q.       You helped prepare this application?

1 A. I prepared it.

2 Q. Okay. Who put these numbers in here?

3 A. I did.

4 Q. So you're saying they're not relevant,  
5 but you're not saying they're not correct?

6 A. I don't know if they're correct or  
7 not.

8 Q. You don't know if these numbers are  
9 correct?

10 A. I have no idea.

11 Q. Water-based inks have some VOM  
12 content, as well, don't they?

13 A. They do.

14 Q. Was it less than 40 percent? You  
15 don't have to answer that if you don't recall. But  
16 there is some VOM from water-based inks, as well?

17 A. That is correct.

18 Q. So these would also be emission units  
19 as that's defined?

20 A. Yes.

21 Q. As long as I'm on it, there was a lot  
22 of talk about the FESOP application that's currently  
23 in there. Mr. Harsch asked you if there had been  
24 any action by Illinois EPA, for which I thought it

1 was a little ambiguous.

2 MR. HARSCH: I believe I asked him  
3 final action.

4 MR. GRANT: Okay. Well, let me just  
5 clarify it.

6 MR. HARSCH: Sure.

7 BY MR. GRANT:

8 Q. Basically, the FESOP permit has not  
9 yet been granted by Illinois EPA, correct?

10 A. That's correct.

11 Q. But there's been a lot of  
12 correspondence back and forth between Illinois EPA  
13 and Packaging, hasn't there been?

14 A. I would not characterize it as a lot  
15 of correspondence in regard to the application, no.

16 Q. In fact, you guys revised -- Packaging  
17 revised their application at one point, right? In  
18 other words, you submitted an initial FESOP and then  
19 you submitted a revised FESOP application?

20 A. We submitted the initial in 2004 and  
21 then a revision in 2006.

22 Q. You understand that Illinois EPA  
23 cannot grant a permit if it would cause a violation  
24 of the Act, correct?



1           A.       I would assume that's the case. I'm  
2 not a lawyer.

3           Q.       And as far as going back and forth  
4 with the Agency, with Illinois EPA on an  
5 application, that's not unusual at all, is it?

6           A.       The going back and forth part, no, it  
7 is not. The length of time is.

8           Q.       You really want the FESOP, huh?

9           A.       It's not that. I just don't  
10 understand the -- it's not trying to get the permit.  
11 I just -- if they got the permit -- they'd be in  
12 compliance.

13          Q.       Well, one issue they have is  
14 insignificant activities, don't they?

15          A.       That's one question to ask us about,  
16 yeah.

17          Q.       And you kind of actually exclude  
18 insignificant activities in the CAAPP permit?

19          A.       Right.

20          Q.       And it's Illinois EPA's position that  
21 that doesn't exist in the FESOP; is that correct?

22          A.       The exemption from permit requirements  
23 do apply to insignificant activities. Their  
24 emissions need to be calculated in determining

1 applicability of major source thresholds. Two  
2 different things.

3 Q. But that's an issue that you still  
4 haven't reached agreement with Illinois EPA on in  
5 the FESOP application; is that correct?

6 A. I don't -- I guess I don't even know  
7 that that's still an issue because they know what  
8 the emission units are, they knew what the  
9 exemptions are. They asked for more information on  
10 emissions, which we gave them. I honestly don't  
11 know what the issue is, Mr. Grant.

12 Q. As soon as we're done, we'll put you  
13 guys together.

14 A. Okay.

15 Q. You testified that you were involved  
16 when -- I don't know if it was you and previous  
17 counsel or just you or just him where PPI requested  
18 an adjusted standard and the Agency said that they  
19 wouldn't support it, correct?

20 A. Correct.

21 Q. At the time you were requesting a  
22 retroactive adjusted standard, right?

23 A. They were requesting an adjusted  
24 standard as a means of compliance. I don't know if

1 retroactive is the right word or not.

2 Q. And at that time they had already been  
3 issued a violation notice, correct?

4 A. Correct.

5 Q. Now press four was -- I think  
6 everybody pretty much agrees it was late 2004 that  
7 press four was shut down, correct?

8 A. Well, it was shut down as a printer in  
9 '02.

10 Q. I'm sorry. It was in 2002?

11 A. Yeah.

12 Q. That it was closed down in 2002?

13 A. Right.

14 Q. But, basically, I think you said that  
15 you came in after the inspection but before the  
16 violation notice?

17 A. Correct.

18 Q. And one of the first things that --  
19 it's my impression, and you correct me, what you did  
20 was you identified that press four was  
21 non-compliant?

22 A. That was fairly early-on, yes.

23 Q. So that would have been late 2001,  
24 early 2002?

1           A.       I would say early to mid 2002.

2           Q.       Why didn't they shut down press four  
3 right away?

4           A.       I think we were, as I testified,  
5 evaluating what our compliance options were,  
6 figuring out a plan that would get us into  
7 compliance.

8           Q.       I want to ask a few questions about  
9 records. And we don't want to totally redo it, but  
10 you'd agree that MSDSs were required well before the  
11 flexographic printing rules were promulgated,  
12 correct?

13          A.       That is my understanding, yes.

14          Q.       So the records that were required  
15 under the flexographic presenting rules aren't  
16 merely MSDS sheets, correct?

17          A.       No. There is more.

18          Q.       Basically, they're not looking for an  
19 entire material safety data sheet with flammability  
20 or threshold emissions or something like that,  
21 they're just looking for VOM content and then  
22 records on ink usage, correct?

23          A.       Depending on your compliance method,  
24 but, yes, that's correct.

1 Q. But those records in that form didn't  
2 exist when you first came on?

3 A. The records were not all in one place,  
4 as I testified where an inspector could easily see  
5 here's the ink, here's the VOM content, here's the  
6 amount of it used. All of those things were in  
7 pieces, but they were not in the form they are now.

8 Q. So it would be accurate to say that  
9 the information was there at the plant, but the  
10 records were not there?

11 A. I guess. And the only reason I'm  
12 hesitating, Mr. Grant, because records has a -- I  
13 know it has a legal meaning and I'm not sure what  
14 that is.

15 So if the information being there  
16 but not in one place is not a record from a legal  
17 sense, then it wasn't. But if the information being  
18 there is a record, then it was. I don't know what  
19 the conclusion is.

20 Q. I understand.

21 MR. GRANT: Just a second.

22 (Brief pause.)

23 BY MR. GRANT:

24 Q. You talked a little bit about NSR or

1 actually about the LAER requirements and those sorts  
2 of things and who was it applicable to and who it  
3 was not applicable to and those sorts of things. My  
4 understanding of those requirements is that in a  
5 noncompliance area -- a major expansion in a  
6 noncompliance area subjects a company to the LAER  
7 regulations; is that accurate?

8 A. If they were a major source and in a  
9 severe ozone non-attainment area and if they attempt  
10 to emit beyond a major source threshold.

11 Q. And that's basically -- let's see, at  
12 the time in DuPage County that would have been  
13 25 tons of VOM, correct?

14 A. That is correct.

15 Q. So it changed? An increase in 25 tons  
16 of VOM would be one you're talking about --

17 A. That would trigger NSR, yes.

18 Q. I want to get into the operating cost  
19 information that you provided.

20 A. Yes.

21 Q. Unknown to me, you actually had  
22 prepared these numbers that were used in the Formel  
23 adjusted standard operating cost numbers for the  
24 adjusted standard petition, correct?

1 A. That is correct.

2 MR. GRANT: And that's Exhibit 57 for  
3 the record.

4 BY MR. GRANT:

5 Q. And I think you said you prepared  
6 these along with Illinois EPA?

7 A. Correct.

8 Q. And I think yesterday Mr. Styzens said  
9 that he didn't just use the numbers, but he adjusted  
10 them downward a little bit to come up with a  
11 reasonable benchmark and that's what he used in his  
12 opinion; do you recall that?

13 A. Yeah. He said, in his opinion, that  
14 was a conservative benchmark.

15 Q. And these costs were prepared for a  
16 regenerative thermal oxidizer. If you need to see  
17 it, I can show you.

18 A. I've got it, 57. But, yes, they were.

19 Q. And that's the same control device  
20 that was installed at Packaging Personified,  
21 correct?

22 A. A regenerative thermal oxidizer was  
23 installed at Packaging Personified, yes.

24 Q. Not the identical device?

1           A.       Right.

2           Q.       I'm not trying to say it's the  
3 identical device.

4                       Now the purpose of developing  
5 these costs for the adjusted standard was to  
6 demonstrate that strict compliance with the  
7 regulations would be unreasonable; isn't that  
8 accurate?

9           A.       Yeah. As in a RACT context, yes.

10          Q.       The idea being that the Board would be  
11 looking for accurate information, you're trying to  
12 prove to the Board if we comply it would be  
13 unreasonably high, therefore, we should get an  
14 adjusted standard?

15          A.       Well, there's a couple concepts, I  
16 guess, in that question. Unreasonably high is based  
17 on how the RACT numbers were developed, not on  
18 necessarily real world numbers. So you're comparing  
19 to the RACT line, not to the real world line.

20          Q.       Anywhere in your testimony at the  
21 adjusted standard hearing did you advise the Board  
22 that these are not real numbers, that these numbers  
23 are unrealistically high? Was there anything in  
24 your testimony where you attempted to show the Board



1 or to let the Board know that these are not the real  
2 numbers?

3 A. That they're conservative numbers? I  
4 don't know that that came up with the Board. It  
5 certainly was a matter of discussion of Illinois  
6 EPA.

7 Q. Basically, this was evidence that  
8 presented to the Board with specific -- very  
9 specific cost numbers on them. Is there anywhere in  
10 your testimony where you're basically advising them  
11 that these are unrealistically high numbers but we  
12 want you to grant the petition on the basis of these  
13 numbers?

14 A. I don't agree that they're  
15 unrealistically high in a RACT analysis context.  
16 They're actually appropriate in a RACT analysis  
17 context.

18 Q. The numbers are very specific. And if  
19 you need to see this, I can request another copy.  
20 But for recuperative thermal you came out with a  
21 control cost of \$18,041 per ton, and with a  
22 regenerative thermal oxidizer you came up with a  
23 control cost of \$10,911 per ton.

24 A. Uh-huh.

1 Q. Those are very specific numbers.

2 A. They are.

3 Q. And how is the Board supposed to know  
4 that these are high numbers if you don't tell them?

5 A. Well, I think if the Board pays  
6 attention to its own rulemakings and looks at the  
7 cost of control that are presented when their RACT  
8 rulemakings are done, they get the same type of  
9 numbers and the numbers come from the same sort of  
10 methodology.

11 So when you do a RACT comparison,  
12 I think the Board would expect that you use the same  
13 methodology as when the RACT baseline was developed.

14 Q. So you expect that the Board would  
15 know that these are vastly overblown figures?

16 MR. HARSCH: I'll object to the  
17 characterization.

18 HEARING OFFICER HALLORAN: Mr. Grant,  
19 you want to rephrase?

20 MR. GRANT: Sure.

21 BY MR. GRANT:

22 Q. Using the information in the CAAPP  
23 permit application that you provided yesterday,  
24 which was for press four, which was totally

1 uncontrolled, it was 20.9 tons that you were seeking  
2 a permit level for -- you can object if you want,  
3 but we went through this arithmetic yesterday.

4 A. Sure.

5 Q. In using the control cost -- the  
6 estimated control cost that you testified to under  
7 oath at the Board adjusted standard hearing, that  
8 would amount to a cost of control above -- in excess  
9 of \$200,000 annually, correct?

10 A. If you're saying that use of a RACT  
11 number compared to another RACT number is  
12 appropriate for penalty purposes, I would disagree.  
13 My understanding is that you're looking for what the  
14 actual cost of what Packaging Personified would have  
15 spent or should have spent, not do a RACT analysis  
16 on them.

17 Q. If you use this \$10,000 number and --  
18 the emissions they were seeking permit for in that  
19 CAAPP permit, it's over \$200,000?

20 A. If you used a \$20,000 number, it would  
21 be over \$400,000.

22 Q. These aren't made-up numbers.  
23 These are numbers that you developed; isn't that  
24 true?

1           A.       They have no relevance to actual costs  
2 in this case.

3           Q.       And you're testifying under oath today  
4 that they actually could have bought a used piece of  
5 equipment and electric and gas have no relation  
6 whatsoever to Exhibit 56 and you're testifying under  
7 oath today that the operating costs would have been  
8 more like a total of \$15,000 or less per year,  
9 that's true, right?

10          A.       For controlling press number four,  
11 that is correct.

12          Q.       So there's a big disconnect between  
13 the numbers that you provided to the Pollution  
14 Control Board for the cost of control in hopes of  
15 getting an adjusted standard and what you're now  
16 claiming are the actual costs that -- you know, when  
17 push comes to shove, this is what they really are  
18 and they're not anywhere close to what these  
19 numbers, what you characterize as RACT numbers, but  
20 they're just numbers?

21          A.       They're RACT numbers. The cost of  
22 75,000 and the associated operating costs were for  
23 controlling one single press. These costs, besides  
24 being in a RACT context, would be for controlling

1 three presses and I believe one laminator at Formel.

2 Q. Let me ask you are you making the  
3 position -- or Packaging is maintaining the position  
4 that it actually could have controlled press five  
5 just using a drying oven, correct?

6 A. Correct.

7 Q. And when they bought a new press,  
8 press six, they didn't install a drying oven and use  
9 it for control, in fact, they installed an RTO,  
10 correct?

11 A. Correct.

12 Q. But is it your position that they  
13 could have just put a drying oven in and never spent  
14 that \$250,000 on press number six?

15 A. Well, it had the drying oven. I think  
16 what you mean is the recirculating drying oven?

17 Q. Whatever it is that you're claiming  
18 that throughout the '90s press five was in control  
19 of.

20 A. Yeah. They could have utilized a  
21 recirculating drying oven. They wouldn't be the  
22 only ones in the industry to do that.

23 Q. And that would have controlled  
24 emissions?

1           A.       Yes.

2           Q.       And so press five and press six could  
3 have been controlled by just putting a drying oven  
4 on? They didn't have to install a \$250,000 RTO to  
5 come into compliance?

6           A.       A recirculating drying oven is another  
7 form of a thermal oxidizer, so I don't know what the  
8 cost of that technology would have been on press six  
9 and I don't know what the cost of it was on five.

10          Q.       I think that -- at least in your  
11 deposition, I don't know if we've talked about it.  
12 But one of the reasons that they thought it was  
13 unreasonable not do a full compliance test on press  
14 five was because the temporary total enclosure was  
15 going to be 15 to \$30,000, somewhere along those  
16 likes?

17          A.       Uh-huh.

18          Q.       So if they could have installed dying  
19 ovens on five and six, five already had one, put it  
20 on six, spent between 15 and \$30,000, why on earth  
21 would they spend \$250,000 on a control device?

22          A.       I don't know the cost of a  
23 recirculating drying oven, which is a control  
24 device. So I don't know the economics of doing a

1 recirculating drying oven and doing a TTE and  
2 whether that's more or less than 250,000.

3 Q. But after evaluating all the  
4 circumstances, they decided to install the RTO,  
5 correct?

6 A. That's correct.

7 Q. And it was a new piece of equipment,  
8 correct?

9 A. That is correct.

10 Q. And they, at least for a period, were  
11 evaluating using a used piece of equipment and then  
12 chose to spend \$250,000 on that piece of equipment,  
13 correct?

14 A. Correct.

15 Q. Are you aware that the State has been  
16 seeking operating cost information on a control  
17 device since at least 2004?

18 A. I don't know. There's been so many  
19 requests. I assume that's true.

20 Q. This is the first time -- yesterday  
21 and today, this is the first time that you've ever  
22 provided us with the actual cost of operation of the  
23 RTO system, correct?

24 A. I didn't actually provide you with

1 actual costs. I gave you a thumbnail estimate.

2 MR. GRANT: Can I have one minute?

3 HEARING OFFICER HALLORAN: Sure.

4 (Whereupon, after a short  
5 break was had, the  
6 following proceedings  
7 were held accordingly.)

8 HEARING OFFICER HALLORAN: We're back  
9 on the record.

10 BY MR. GRANT:

11 Q. Just one last question. We were  
12 talking about Argus, especially Mr. Harsch and I  
13 were talking about Argus. You weren't involved in  
14 those permit discussions, were you?

15 A. I was not.

16 Q. And not with the negotiations with  
17 Illinois EPA?

18 A. No.

19 MR. GRANT: That's all the questions I  
20 have. Thanks. I'm going to move  
21 Mr. Trzupek's testimony in the adjusted  
22 standard hearing into evidence as  
23 Complainant's Exhibit 14.

24 MR. HARSCH: I have no objection.



1 HEARING OFFICER HALLORAN:

2 Complainant's Exhibit 14 is admitted. And I  
3 assume, Mr. Grant, you'll get that to me  
4 sometime?

5 MR. GRANT: Yes.

6 HEARING OFFICER HALLORAN: Thank you.

7 Mr. Harsch, redirect.

8 REDIRECT EXAMINATION

9 BY MR. HARSCH:

10 Q. You've participated in rulemakings  
11 before the Pollution Control Board?

12 A. Yes.

13 Q. And is the concept, RACT standard,  
14 reasonably available control technology?

15 A. Yes, it is.

16 Q. And was reasonably available control  
17 technology essentially a requirement that US EPA --  
18 if you know, that US EPA came up with under the  
19 Clean Air Act to regulate sources of VOM in  
20 non-attainment areas?

21 A. Yes.

22 Q. And did US EPA publish control  
23 technique guidelines based on RACT development  
24 documents to assist the states in developing and

1 adopting RACT regulations?

2 A. Yes, they did.

3 Q. And are you familiar with the  
4 development documents in terms of how costs were  
5 developed by US EPA?

6 A. Yes.

7 Q. When you responded to Mr. Grant I  
8 think in your direct testimony you used the same  
9 US EPA methodology for developing a cost of control  
10 that you presented to the Board in the three  
11 adjusted standard cases?

12 A. Yes.

13 Q. Is it your understanding that in  
14 determining whether or not a source can give relief  
15 generally from a RACT regulation you would look at  
16 the cost per ton and your cost per ton using the  
17 same methodology exceeds that, then you become  
18 eligible potentially for relief?

19 A. That's my understanding.

20 Q. Is the same concept also applied in  
21 determining under the US EPA guidance and directives  
22 to the states for calculating best available control  
23 technology?

24 A. Yes, it is.

1 Q. So the US EPA goes through, again, and  
2 promulgates as part of rulemaking what is the best  
3 available technology for a given level of sources  
4 and that's based on development documents and cost  
5 information?

6 A. Yes.

7 Q. And it's the same general format that  
8 you follow?

9 A. Yeah. There's a few more bells and  
10 whistles on the BACT analysis, but you come down to  
11 a cost per ton that becomes compared to whatever was  
12 used for development.

13 Q. At the time the three adjusted  
14 standards were under consideration, you were part of  
15 a task force?

16 A. I was.

17 Q. In fact, you represented technically  
18 all of the companies?

19 A. That is correct.

20 Q. And Mr. Bloomberg represented the  
21 Illinois EPA?

22 A. That is correct.

23 Q. Were there any other technical people  
24 at IEPA involved?

1           A.       I don't recall. There may have been,  
2 I just don't recall if there was anybody else.

3           Q.       Were the adjusted standard petition  
4 drafts reviewed by Mr. Bloomberg?

5           A.       Yes.

6           Q.       Was the supporting evidence reviewed  
7 by Mr. Bloomberg?

8           A.       Yes.

9           Q.       And is it your understanding that  
10 Illinois EPA and Mr. Bloomberg accepted them?

11          A.       Yes. And I recall, you know, clearly  
12 we had a good deal of discussions on how we were  
13 doing it, the methodology we were using before those  
14 numbers were accepted.

15          Q.       And is it your recollection and  
16 testimony that Mr. Bloomberg was absolutely aware  
17 that these were not actual costs, but were  
18 calculated in the same manner as the RACT  
19 development?

20          A.       That was absolutely part of the  
21 discussion, yes.

22          Q.       And, in fact, was there separate  
23 discussion about whether or not to use actual  
24 numbers versus these calculated numbers?

1           A.       Yeah. The Agency and Mr. Bloomberg  
2 expressed, you know, initially whether we should be  
3 using -- whether these numbers were not appropriate  
4 and too high or whether we should be using actual  
5 data or not.

6           Q.       And what was the outcome of that  
7 discussion?

8           A.       Eventually, it was decided that we  
9 would use the EPA spreadsheets and those as our  
10 developmental numbers.

11          Q.       I think you responded that you used  
12 RACT numbers and compared them with RACT numbers?

13          A.       Correct.

14          Q.       In addition to having to comply with  
15 the RACT regulations, if Packaging was a major  
16 source, greater than 25 tons of potential to emit,  
17 and did not have any enforceable permit limitations,  
18 then the addition of a new press -- strike that --

19                   In addition to just complying with  
20 the RACT regulations through the potential  
21 recirculating press that you responded to in  
22 Mr. Grant's questions, wouldn't there also be  
23 potential NSR issues with the installation of press  
24 six?

1 A. Yes.

2 Q. So in addition to having concerns over  
3 just complying with the RACT regulations, you had to  
4 look at how press six would fit -- the addition of a  
5 new source, press six, would fit into the RACT  
6 regulations -- or fit into the permitting  
7 requirements?

8 A. Well, yeah, if there was an NSR issue,  
9 we would have to consider the possibility that we'd  
10 have to be complying with LAER, lowest achievable  
11 emission reduction.

12 Q. Are you familiar with the situations  
13 where engineering estimates of the type that you  
14 performed at Packaging on press five have been  
15 accepted by the Agency in permits drafted --

16 A. Yes.

17 Q. -- and issued?

18 A. Yes, I am.

19 Q. Would those permits potentially then  
20 require the requirement to stack test within a given  
21 time?

22 A. Yes. At least one example I can think  
23 of did.

24 Q. An some are issued without it?

1 A. Correct.

2 Q. Between the time that press four was  
3 shut down in December of 2002, how much time do you  
4 recall press five was equipped with a -- hooked up  
5 to the RTO?

6 A. I believe that they re-ducted five to  
7 the RTO when six came in, so I guess late 2003.

8 Q. So essentially less than 12 months?

9 A. Yeah, that would be correct.

10 MR. HARSCH: I have no further  
11 questions.

12 HEARING OFFICER HALLORAN: Thank you,  
13 Mr. Harsch. Mr. Grant.

14 MR. GRANT: Just a couple.

15 RE CROSS EXAMINATION

16 BY MR. GRANT:

17 Q. You talked about engineering estimates  
18 and permits with subsequent stack testing, correct?

19 A. Yes.

20 Q. Engineering estimates are not used to  
21 demonstrate compliance with the regulations,  
22 correct?

23 A. I guess I should have brought this up  
24 earlier, but the term engineering estimate in the

1 permit context has a very specific meaning. It's  
2 when you have your determination method for how you  
3 figured your emission rate, there's a code for it, I  
4 don't know if it's five or whatever it is, but  
5 that's an engineering estimate. There's another  
6 code for stack test, another code for material  
7 balance.

8 Well, this is not a formal stack  
9 test just because it's a term of art. I would not  
10 consider this an engineering estimate. I would  
11 consider it an informal stack test. And they're  
12 certainly having permits issued with limits on them  
13 based on informal stack tests.

14 Q. Going back to the adjusted standard  
15 petition, in your opinion would the Pollution  
16 Control Board have granted Formel or the others an  
17 adjusted standard if the cost per ton of VOM control  
18 was \$1,000 a ton?

19 A. If they were comparing it to the RACT  
20 number, I'm sure they would not.

21 MR. GRANT: That is all.

22 HEARING OFFICER HALLORAN: Thank you,  
23 Mr. Grant. Mr. Harsch.

24



1 RE-REDIRECT EXAMINATION

2 BY MR. HARSCH:

3 Q. If that \$1,000 was calculated using  
4 the US EPA calculation method or spreadsheet, was  
5 that your assumption in answering the question of  
6 Mr. Grant?

7 A. Yeah. That's what I meant to express.

8 Q. Is it your understanding that had  
9 the -- if both sets of cost figures, for example,  
10 would have been provided, the comparison is still  
11 done, RACT calculation method prescribed for a  
12 US EPA rulemaking and then the control technique  
13 guidelines and the RACT development documents?

14 A. That is my understanding, Mr. Harsch.

15 MR. HARSCH: Thank you.

16 HEARING OFFICER HALLORAN: Thank you,  
17 Mr. Harsch. Mr. Grant, anything further?

18 MR. GRANT: No.

19 HEARING OFFICER HALLORAN: Thank you,  
20 Mr. Trzupsek. We can go off the record,  
21 please.

22 (Whereupon, a discussion  
23 was had off the record.)

24 HEARING OFFICER HALLORAN: Back on the

1 record. We're going to take a lunch break.  
2 Right now it's 11:45. No later than 12:45  
3 I'd like everyone back. Thank you.

4 (Whereupon, after a short  
5 break was had, the  
6 following proceedings  
7 were held accordingly.)

8 HEARING OFFICER HALLORAN: We're back  
9 on the record. It's approximately 12:47.  
10 Thank you for coming back at the designated  
11 time.

12 Right now we're still in Packaging  
13 Personified's case in chief and I believe we  
14 have Mr. McClure on the stand.

15 (Witness sworn.)

16 WHEREUPON:

17 CHRISTOPHER MCCLURE

18 called as a witness herein, having been first duly  
19 sworn, was examined and testified as follows:

20 DIRECT EXAMINATION

21 BY MR. HARSCH:

22 Q. Mr. McClure, would you please state  
23 your complete name for the record?

24 A. Christopher McClure.

1 Q. And who are you presently employed by?

2 A. Navigant Consulting.

3 Q. And have you been engaged and Navigant  
4 Consulting been engaged to provide expert analysis  
5 and testimony in this case?

6 A. Yes.

7 Q. I draw your attention to the black  
8 books behind you, the first one, book one of two.  
9 Please look at what has been marked and accepted as  
10 Exhibit 3.

11 HEARING OFFICER HALLORAN: That's  
12 Respondent's Exhibit 3?

13 MR. HARSCH: Yes.

14 BY MR. HARSCH:

15 Q. Will you explain what this document  
16 is?

17 A. Exhibit 3 is my resumé, curriculum  
18 vitae.

19 Q. And is that a true and accurate copy  
20 of your resumé or curriculum vitae?

21 A. It is.

22 Q. And will you describe for the Board  
23 briefly your relevant educational background?

24 A. I have an undergraduate degree from

1 Trinity University in accounting and finance and a  
2 master's degree, an MBA with specializations in  
3 finance and business strategy from the Kellogg  
4 School at Northwestern University.

5 In addition, I hold a number of  
6 professional designations that require continuing  
7 educational requirements every year. I am a CPA, a  
8 CFE and a CFN.

9 Q. Would you please explain for the  
10 record what those acronyms stand for?

11 A. A CPA is a certified public  
12 accountant, which is a designation that is provided  
13 for by the American Institute of CPAs.

14 A CFE is a certified fraud  
15 examiner, which is a designation issued by the  
16 American Society of Certified Fraud Examiners.

17 And the CFF is a certification in  
18 financial forensics, which is also granted by the  
19 American Institute of CPAs.

20 Q. Since your graduation from the Kellogg  
21 School at Northwestern, can you briefly summarize  
22 your educational -- your related work experience?

23 A. So that would be about six years and  
24 for most of that time I worked at Navigant

1 Consulting where I've been, most recently, a  
2 director focussed on a variety of types of  
3 engagements, litigation-related engagements,  
4 corporate investigations and environmental-regulated  
5 projects, some of which include economic benefit  
6 analysis.

7 Q. Have you testified in and been  
8 accepted as an expert in previous proceedings?

9 A. Yes, I have.

10 Q. And what were those proceedings with?

11 A. A case in front of the Pollution  
12 Control Board.

13 Q. Would that be the State's case against  
14 Toyal?

15 A. Correct.

16 Q. Have you calculated economic benefit  
17 for anyone else?

18 A. I've calculated economic benefit in  
19 this case, in the Toyal case and in two other  
20 federal matters.

21 Q. Are those still pending cases?

22 A. They are.

23 Q. Can you explain the work that you've  
24 performed on behalf of Packaging for this case?

1           A.       Sure. I was asked in December of last  
2 year to get involved in the Packaging case to  
3 conduct an independent analysis of the potential for  
4 an economic benefit that Packaging may or may not  
5 have enjoyed by virtue of a period of noncompliance  
6 related to a specific press at their Carol Stream  
7 facility.

8                       So in order to perform that  
9 analysis, I took a number of steps which included  
10 conducting a series of discussions with their  
11 technical advisor, Mr. Rich Trzupsek, also discussed  
12 the various aspects of the case with Mr. Tim Piper  
13 of Packaging Personified, had obviously a number of  
14 discussions with counsel, reviewed the relevant case  
15 documentation, the BEN Manual, the Federal Register  
16 and the other general guidelines that are employed  
17 in cases such as this and calculated a set of  
18 potential economic benefit scenarios that I have  
19 included with my report in this case.

20           Q.       Had you had prior involvement in this  
21 case?

22           A.       Yes. Navigant was retained a few  
23 years ago to participate in this case from a  
24 settlement perspective, and a colleague of mine was

1 involved in the case -- a leading case at that point  
2 from Navigant's perspective -- and I assisted him in  
3 looking at the scenarios and looking at some of the  
4 numbers probably in the 2007 time frame.

5 Q. Did you rely on any information  
6 provided by either Packaging or Packaging's  
7 consultant, Mr. Trzupsek?

8 A. Yes, I did.

9 Q. And what did you rely upon?

10 A. I relied on Mr. Trzupsek's buildup of  
11 cost estimates that were employed in the scenarios  
12 that I included in my report. Specifically,  
13 Mr. Trzupsek provided costs for an appropriate-sized  
14 RTO and he also provided costs for decommissioning  
15 and moving a press and then also an estimate of what  
16 an adjusted standard approach might have cost  
17 Packaging Personified.

18 Q. Did you examine those costs?

19 A. I did.

20 Q. And did you find them to be  
21 reasonable?

22 A. I did.

23 Q. What was your understanding as to the  
24 status of compliance with the substantive

1 regulations for press one, two and five at  
2 Packaging?

3 A. My understand was that all of the  
4 presses were in compliance with the exception of  
5 press four, so that's the one that I focused my  
6 analysis on.

7 Q. Does the fact that press four was shut  
8 down and its noncompliance ending at its shutdown  
9 and last use of printing in 2002 affect your  
10 analysis?

11 A. The date that the press was shut down  
12 would provide the end date of the period of  
13 non-compliance, in this case at the end of 2002  
14 which is the -- completes the end of the  
15 non-compliance period in my analysis.

16 Q. And you relied upon the opinion of  
17 Mr. Trzupsek that press five was in compliance?

18 A. I did.

19 Q. And that was without the addition of  
20 the RTO that was for \$250,000 that was purchased and  
21 hooked up to the new press six and press five?

22 A. That is my understanding, yes.

23 Q. Did you prepare a report for this  
24 proceeding?



1           A.       I did.

2           Q.       And is that report contained in a  
3 separate binder marked as Exhibit 4?

4                   MR. HARSCH: Off the record.

5                               (Whereupon, a discussion  
6                               was had off the record.)

7 BY MR. HARSCH:

8           Q.       Would you please explain what  
9 Exhibit 4 is?

10          A.       This binder, Exhibit 4, contains my  
11 report, a curriculum vitae and then a number of  
12 documents that I relied upon in this case, including  
13 the report of Mr. Trzupsek, the report of Mr. Styzens  
14 from the Illinois EPA, the deposition of Mr. Styzens  
15 and a number of other documents that provide support  
16 regarding the calculation of economic benefit.

17          Q.       And this consists of basically all the  
18 documents you relied upon?

19          A.       Yes.

20                   MS. WHEELER: Do you have a copy of  
21 that for me, Mr. Harsch? Off the record  
22 please.

23

24

1 (Whereupon, a discussion  
2 was had off the record.)

3 HEARING OFFICER HALLORAN: Back on the  
4 record. We're going to label this separate  
5 binder that's entitled expert report of  
6 Christopher McClure. It's approximately  
7 four inches thick. We're going to name it  
8 Respondent's Exhibit 4A, Group 4A. Thank  
9 you. Sorry, Mr. Harsch.

10 MR. HARSCH: I have no problem with  
11 your suggestion.

12 BY MR. HARSCH:

13 Q. Exhibit 4 in our black binder,  
14 Respondent's Exhibit 4 is just a copy of your report  
15 itself; is that correct?

16 A. Correct.

17 Q. And the report is the same report  
18 that's contained in Group Exhibit 4A?

19 A. Correct.

20 Q. And the documents that you were  
21 referring to beforehand that were contained in your  
22 part of your official report are the documents that  
23 are set forth in the binder marked Group Exhibit 4A?

24 A. Correct.

1 Q. Why is the concept of economic benefit  
2 an important concept?

3 A. Well, the EPA created the economic  
4 benefit concept as part of its ultimate overall  
5 penalty ideology to encourage companies to come into  
6 compliance.

7 And there's two main components.  
8 The one is gravity, which we're not addressing here.  
9 We're looking at the other component, which is  
10 economic benefit. And, specifically, the goal, as I  
11 understand it, the way the EPA describes it, is to  
12 calculate ultimately an amount that would make a  
13 potential violator indifferent between adhering to  
14 the law and not adhering to it. So, essentially,  
15 the penalty would erase any economic benefit that  
16 the violator enjoyed by delaying and/or avoiding any  
17 costs that would have been expended for  
18 environmental compliance.

19 Q. And you're aware that -- I believe  
20 it's Section 42(a) of the Illinois Environmental  
21 Protection Act directs --

22 MS. VILLASENOR-RODRIGUEZ: It's (h).

23 BY MR. HARSCH:

24 Q. Excuse me, 42(h) directs the lowest

1 cost alternative be used?

2 A. Correct.

3 Q. How did -- explain how you proceeded  
4 to calculate the various economic benefit  
5 alternatives?

6 A. Well, as I explained, we reviewed -- I  
7 reviewed the key documents in the case, conducted  
8 discussions with counsel, Mr. Trzupsek, Mr. Piper and  
9 got a good understanding of at the time that  
10 Packaging Personified should have been in compliance  
11 in the beginning of 1997 what some of their  
12 alternatives were for achieving compliance.

13 So, again, we were looking back  
14 from present day at a period in time from the  
15 beginning of 1997 until the press is decommissioned  
16 at the end of 2002 where they were non-compliant.

17 So the goal of the economic  
18 benefit is to understand what should they have  
19 expended that they did not. And when we started to  
20 investigate what the climate was at the time, what  
21 the alternatives were, what their competitors were  
22 doing and what kind of things were available to the  
23 company, we came up with -- we understood and I  
24 understood from discussing with Mr. Trzupsek that

1 basically there were three general alternatives that  
2 the company could have pursued at that time.

3           The first of which was to pursue  
4 an adjusted standard, which we've discussed here in  
5 the testimony, which a number of their competitors  
6 applied for and achieved, which would have  
7 essentially made it such that Packaging would have  
8 reached compliance so to speak for that time period.

9           And when we discussed the costs  
10 that were involved in that, Mr. Trzupsek had an  
11 estimate based on his very relevant experience  
12 direction with direct competitors of Packaging that  
13 had achieved the adjusted standard.

14           Then when we talked about other  
15 alternatives and when I questioned Mr. Trzupsek and  
16 Mr. Piper about other things that the company could  
17 have done, were there other compliance alternatives,  
18 what types of compliance equipment could have been  
19 installed, we discussed that the company could have  
20 pursued a piece of compliance equipment called an  
21 RTO.

22           And at that time to control the  
23 one press that was non-compliant, an RTO of the  
24 appropriate size, based on Mr. Trzupsek's estimate,

1 would have cost approximately \$75,000 that the  
2 company could have put that in place and then, of  
3 course, would have had an ongoing annual operating  
4 expense.

5 And then the last alternative that  
6 the company could have pursued and ultimately did  
7 pursue is simply to turn off the non-compliant press  
8 and they ultimately did that. Later on, they ended  
9 up relocating that press to a plant in Michigan.

10 And so when I looked at that  
11 alternative, I decided to include all of those costs  
12 as something that they could have done as of 1997.  
13 Even though technically that plant wasn't available  
14 to them, really the cost of that scenario should  
15 probably be at zero or de minimis because really all  
16 they have to do is shut the press off. But their  
17 ultimate decision was to move it, so I included all  
18 of those costs which maybe creates a little bit of a  
19 higher economic benefit in that scenario.

20 But those are the scenarios, those  
21 are the reasonable alternatives that I determined  
22 were available to the company in 1997 and those are  
23 the costs that I've outlined in my report.

24 Q. After you arrived at these costs, how

1 did you proceed to calculate an economic benefit?

2 A. Well, for the compliance option one,  
3 which I have as the adjusted standard, really what  
4 we're looking at is the time value of the \$30,000  
5 essentially was the cost estimate. So we make some  
6 adjustments for the different periods in time.

7 So Mr. Trzupsek estimated a couple  
8 of years ago in 2007 dollars that the cost of the  
9 adjusted standard would be about \$30,000. So I had  
10 to make some calculations to take those dollars back  
11 in time using a cost index or a plant cost index to  
12 equate those dollars to 1997 dollars, and then you  
13 bring them forward and see how much the company  
14 earned over time by avoiding that \$30,000. So the  
15 net value that the company achieved was the \$30,000,  
16 basically, plus the time value.

17 So under that theory, under that  
18 alternative the company avoided the cost of applying  
19 for the adjusted standard of \$30,000 plus an  
20 additional \$3,707 for the time value. And so that's  
21 how I calculated the proposed economic benefit under  
22 that scenario.

23 Q. How much did you calculate?

24 A. The total for that scenario was

1     \$33,707.

2           Q.       And did you follow any recommended  
3     guidance in doing this calculation?

4           A.       Absolutely. The guidance for economic  
5     benefit is promulgated by the US EPA. And the EPA  
6     issues a BEN Manual, that's a user manual that  
7     provides guidance on generally how an economic  
8     benefit should be calculated.

9                    In addition to that, there are  
10    other documents that you can rely on. The Federal  
11    Register provides some additional guidance as the  
12    case law evolves. And as peer articles are written  
13    and as the EPA seeks more guidance on the  
14    appropriate methods for certain variables that are  
15    included in the economic analysis, then more  
16    articles are produced from the finance and legal and  
17    investment communities. So I review a lot of those  
18    documents to try to stay current on the new issues  
19    that are arising in penalty calculation.

20          Q.       How did you calculate the economic  
21    benefit for installing the control device  
22    alternative?

23          A.       In that scenario, we would envision  
24    that in 1997 Packaging Personified would have had an



1 initial capital outlay of approximately \$75,000  
2 adjusted for time value and then the system would  
3 have been in operation and would have had an annual  
4 operating cost.

5 So they delayed a capital  
6 expenditure, in theory, of \$75,000 so they would  
7 have enjoyed the time value of those dollars plus  
8 permanently avoiding the annual operating costs  
9 throughout that time period that would be associated  
10 with that piece of compliance equipment. So the  
11 summation of those amounts adjusted for time value  
12 yielded a potential economic benefit of \$119,020.

13 Q. And you used the same guidance  
14 documents from US EPA that you previously testified?

15 A. Yes. I used the same guidance and  
16 then the cost estimates, again, that I would have  
17 used for both the capital outlay and then the annual  
18 avoided costs were provided by Mr. Trzupek.

19 Q. And the capital outlay was for the --  
20 that was for a -- it was testified to earlier today  
21 as the reconditioned/used?

22 A. My understanding was that it was for a  
23 refurbished RTO that was of the appropriate size to  
24 handle the compliance need for press number four at

1 Packaging Personified.

2 Q. And the operating costs Mr. Trzupsek  
3 provided -- did you previously testify that  
4 Mr. Trzupsek provided those to you?

5 A. Correct.

6 Q. We've had quite a bit of testimony in  
7 this proceeding so far about actual operating costs  
8 versus these predicted operating costs using the EPA  
9 prescribed formula. What operating costs do you  
10 understand that you've used?

11 A. My understanding in discussions with  
12 Mr. Trzupsek is that we were able to come up with and  
13 he was able to build up the actual operating costs  
14 to the best of his knowledge of a properly-sized  
15 refurbished RTO.

16 Q. And the third scenario?

17 A. And the last scenario would have to do  
18 with Packaging Personified decommissioning and then  
19 ultimately moving the press to Michigan, and there  
20 was a cost estimate that was provided by Mr. Trzupsek  
21 of approximately \$15,000.

22 So what we -- when I included  
23 those costs, I pushed them all the way back to 1997  
24 so essentially indicating that the company would

1 have had the value of those dollars for the entire  
2 compliance period. That's probably overstating the  
3 dollar amounts a little bit because we know that  
4 they were able to decommission the press in 2002  
5 and at that point become compliant and then didn't  
6 move the press until later. But for simplicity and  
7 conservatism, I just included all of those dollars  
8 and moved them back to the beginning of the time  
9 frame.

10 Q. And you used the same guidance and  
11 methodology for --

12 A. Correct.

13 Q. -- taking costs back and forward?

14 A. Correct. And that yielded a potential  
15 economic benefit of \$16,853.

16 Q. And did you take into consideration --  
17 you were here yesterday when there was testimony  
18 regarding the fact that it turned out there was an  
19 actual savings once the work was transferred from  
20 press four to press five because you didn't have  
21 start-up and shutdown; is that correct?

22 A. That's what I understood from the  
23 testimony, yes.

24 Q. Your calculations did not assume any

1 such --

2 A. It does not.

3 Q. -- savings?

4 So, again, that would be  
5 conservative?

6 A. Correct.

7 Q. You've reviewed the economic benefit  
8 work performed by Mr. Styzens as part of this  
9 proceeding, as well?

10 A. I have.

11 Q. Can you explain what the significant  
12 differences are in the two approaches to calculating  
13 economic benefit?

14 A. Yes. I would say, structurally, the  
15 two analyses are similar. I think they're set up  
16 similarly.

17 But the significant differences  
18 relate to the input variables, the cost data that's  
19 included, and also the input of the compliance  
20 period. And then to a lesser extent, some of the --  
21 the discount rate that's used.

22 Q. Let's talk briefly about the discount  
23 rate. I believe Mr. Styzens said that he used a  
24 prime rate and you used a risk-free rate?

1           A.       Correct.

2           Q.       Why did you utilize the risk-free  
3 rate?

4           A.       The cash flows that we're discussing  
5 here are past cash flows that are known, so the  
6 risk-free rate is appropriate.

7                    A weighted average cost of capital  
8 that people talk about or the bank rate that  
9 Mr. Styzens used as a proxy for the weighted average  
10 cost of capital is a rate that's built up that  
11 people use to justify an investment in future,  
12 unexpected, unknown and risky cash flows.

13                   So the rate that I used because  
14 the cash flows are known because they're known  
15 environmental expenditures is risk-free versus a  
16 weighted average cost of capital, which contemplates  
17 the debt and the equity and the risk premiums and  
18 the beta of the company and all the other financial  
19 criteria that you build into a rate when you're  
20 calculating a weighted average cost of capital and  
21 contemplating an investment in a company for the  
22 future.

23                   And, again, the use of the  
24 risk-free rate is well-supported both in the WCI

1 case that I provided, in the literature that I  
2 provided, as well, and in some of the EPA guidance  
3 that I've seen in other areas where the EPA  
4 discounts its own costs.

5 Q. So is it fair to say that it's an  
6 undecided issue or an issue with two sides of  
7 differing opinions on?

8 A. I think that's fair. It's still open  
9 for comment. I think you'll see a lot of argument  
10 on both sides. And in reality, in this case it  
11 really isn't that big of an issue. It's far  
12 outweighed by the cost inputs, the capital outlay  
13 and the annual avoided costs that we have here.

14 Q. And, in fact, I think when you said it  
15 was still up for comment, US EPA has requested  
16 public comment on this issue?

17 A. The EPA takes public comment on the  
18 BEN approach and on the BEN Model, and that's  
19 reflected in the Federal Register.

20 Q. The compliance period, if you were to  
21 extend your calculations out to the date that  
22 Mr. Styzens used, can you briefly -- I guess it  
23 would be scaling up those numbers sort of. What end  
24 date did he use?

1           A.       My end date is 12/31/02. I believe  
2 Mr. Styzens's is one year longer. So if I were to  
3 adjust my schedules to reflect an additional year, I  
4 believe that what you would see is very small  
5 incremental changes to the adjusted standard which  
6 is now 33-and-a-half thousand, would probably go up  
7 another five hundred to a thousand dollars.

8                   The decommissioning alternative,  
9 similarly, which is 16,800, would increase a very  
10 small amount, somewhere between \$400 to \$800.

11                   And then the compliance  
12 alternative that includes the installation of the  
13 refurbished RTO would increase a little more. It's  
14 119 right now and I would estimate that that would  
15 increase somewhere between \$16,000 and \$20,000 for  
16 an additional year.

17           Q.       Are there any other significant  
18 differences -- are there any other differences  
19 besides the discount rate and the period of time  
20 and, obviously, the capital input and the operating  
21 cost input that you testified about?

22           A.       No.

23           Q.       Are you aware of any guidance from  
24 US EPA on how to -- what you would include or not

1 include as capital costs and operating costs where a  
2 company has built a control device allowing for  
3 potential for future growth?

4 A. Yes, I have.

5 Q. And what is that guidance?

6 A. Well, the general overarching  
7 principle of the economic benefit is that you use  
8 the lowest cost approach. And when you have a  
9 situation where the control device that's installed  
10 is larger than what's minimally required to achieve  
11 compliance, for example, if that control device is  
12 larger in anticipation of accommodating new products  
13 or additional capacity, then the BEN Manual  
14 specifically indicates that you should take steps to  
15 bifurcate those costs in order to understand what is  
16 required for compliance versus what is accommodating  
17 future growth.

18 Q. And where is that contained in the BEN  
19 Manual?

20 A. It's Page 3-9 in the BEN Manual.  
21 There's a compliance cost component section and  
22 subpoint two covers that exact scenario that you  
23 described.

24



1 HEARING OFFICER HALLORAN:

2 Mr. McClure, for the record, is referring to  
3 Respondent's Group Exhibit 4A, just for  
4 clarification. Thanks.

5 BY MR. HARSCH:

6 Q. A copy of the BEN Manual is in 4A?

7 A. Correct.

8 Q. You've sat through all the testimony  
9 in this proceeding to date. It's your understanding  
10 that Formel and Vonco and Bema are competitors to  
11 Packaging based on that testimony?

12 A. Yes.

13 Q. And it's your understanding that they  
14 were granted an adjusted standard that provided they  
15 did not have to install a control equipment subject  
16 to certain conditions?

17 A. Yes.

18 Q. And is it your further understanding  
19 these companies subsequently, when they expanded  
20 their businesses, added new sources and control  
21 equipment?

22 A. Yes.

23 Q. Do you have an opinion as to whether  
24 or not it levels the playing field if Packaging

1 Personified, who's added a new press and control  
2 device, is assessed the economic penalty that  
3 Mr. Styzens is suggesting should be assessed?

4 MS. WHEELER: Objection. I believe  
5 that's an ultimate fact that the Board will  
6 be determining. I don't think that's a  
7 proper question for him to answer.

8 HEARING OFFICER HALLORAN: Objection  
9 overruled. Mr. McClure can answer if he's  
10 able to.

11 BY THE WITNESS:

12 A. In my opinion, that would be a gross  
13 overestimation of the appropriate penalty. The  
14 concept of leveling the playing field specifically  
15 relates to making competition equal amongst  
16 companies that choose and do not choose to become  
17 compliant.

18 In this case, we are able to  
19 specifically identify during the relevant time  
20 period competitors who had very similar fact  
21 patterns and we know exactly what they did and how  
22 much it cost them. So it's very easy to see in this  
23 particular case what Packaging very likely could  
24 have spent at that time period in 1997 to achieve an

1 adjusted standard and to move forward and then at  
2 the date that they decided to increase production,  
3 take additional steps.

4 But to me these companies are very  
5 analogous and we have a very clear basis of  
6 reference for an appropriate penalty amount in this  
7 case.

8 BY MR. HARSCH:

9 Q. Of the three scenarios, which one do  
10 you believe more appropriately levels the playing  
11 field?

12 A. Well, my personal feeling is that the  
13 adjusted standard scenario is the most appropriate,  
14 again, because we're able to observe direct  
15 competitors which is sometimes not very easy to do  
16 in these cases.

17 But in this particular case we  
18 have very specific competitors and we know exactly  
19 what they paid and so I think it's very appropriate  
20 that Packaging Personified, had they known about the  
21 adjusted standard, I don't have any doubt that they  
22 would have pursued that, as well, and as Mr. Trzupek  
23 explained, very likely would have achieved it and  
24 moved forward in compliance.

1 Q. Your master's degree is in what?

2 A. I have a master's in business  
3 administration with specializations in finance and  
4 business strategy.

5 Q. And you've been a consultant to a  
6 number of businesses?

7 A. Yes.

8 Q. And Navigant is a professional  
9 consultant to a number of businesses?

10 A. At Navigant, at LECG prior to that and  
11 for a number of years at Arthur Andersen.

12 Q. You sat here and you listened to the  
13 testimony by Mr. Styzens regarding management  
14 decisions and how decisions are made?

15 A. Yes.

16 Q. Do you agree with that  
17 characterization in the context of complying with  
18 environmental rules?

19 A. I understood him to indicate that  
20 management always makes the lowest cost decision and  
21 I don't agree with that. I believe that in  
22 decisions where management is free to make purely  
23 economic decisions and decisions about where to  
24 compete and decisions about which products to

1 produce, in those types of decisions certainly cost  
2 and competition and clients and all these other  
3 variables come into play.

4 The difference here is that we're  
5 talking about an economic compliance decision which  
6 is compelled by an outside agency. So while there  
7 may be some variables that are at play, ultimately,  
8 to me, that decision is largely controlled by those  
9 laws and regulations. So it's a different type of  
10 decision that isn't governed entirely by the cost of  
11 the decision.

12 Q. Does trying to resolve a pending  
13 compliance issue with a regulatory agency also  
14 factor in as a reasonable constraint on management  
15 decisions in your view?

16 A. Yes.

17 Q. Do you find that to be -- you've sat  
18 here through the testimony where that's been  
19 explained. Do you find that to be consistent with  
20 your understanding of management decisions and  
21 corporate decisions?

22 A. In what regard?

23 Q. As the basis for such a decision.

24 A. I'm sorry, can you restate the

1 question?

2 Q. I'll just totally withdraw it and  
3 start over again.

4 You were here when Packaging  
5 Personified testified that part of the reason they  
6 made the decision to install the RTO that they did  
7 and hook up number five was in the hopes to reach  
8 resolution of their compliance issue with the State  
9 of Illinois?

10 A. Yes.

11 Q. Is the fact that -- does that desire  
12 strike you as a reasonable basis for management to  
13 make a decision?

14 A. Yes. It certainly is something that's  
15 going to play into a management decision and, again,  
16 is going to -- in a lot of times that will override  
17 that simple desire to cut costs or keep things as  
18 cheap as possible because you're being compelled,  
19 again, by an outside agency to commit to these  
20 expenditures.

21 Q. I may have asked this, but I'm going  
22 to ask it again. You thoroughly reviewed  
23 Mr. Styzens's report and his deposition that was  
24 given in this proceeding?

1           A.       Yes.

2           Q.       And, again, not down to the level of  
3 discounted rates, what are the significant  
4 differences?

5           A.       The most significant differences are  
6 the cost inputs, the capital expenditure and the  
7 annual operating costs and then after that the next  
8 significant difference would be the compliance  
9 period.

10          Q.       Since you didn't deal with  
11 non-compliance for press five, if it's ultimately  
12 determined that control -- that some economic  
13 benefit is determined for press five, would your  
14 calculation for press four adjusted for another year  
15 be a rough explanation of appropriate economic  
16 benefit or do you have an opinion as to that?

17          A.       I don't have an opinion. I would have  
18 to look at all the facts and circumstances if they  
19 changed.

20          Q.       If the control device cost would be  
21 similar for a similar add-on device, the operating  
22 costs would be the same, under that hypothetical --  
23 would your economic benefit analysis for the add-on  
24 control for press four adjusted for the additional

1 year be applicable?

2 A. Assuming that the dates became  
3 appropriate and the cost stayed in the same range,  
4 then the math would play out that it would be a  
5 proxy for it. But, again, I'd have to look at all  
6 the details to understand that.

7 Q. And you've sat here and understood  
8 that press five was hooked up to new RTO unit a year  
9 later than -- in the same time frame as Mr. Styzens  
10 calculates his economic benefit?

11 A. Yes.

12 Q. So under that scenario it would be  
13 that economic benefit plus the cost of  
14 decommissioning press four would be the total  
15 economic benefit?

16 A. Again, I would have to look at all the  
17 facts around the case.

18 MR. HARSCH: I have no further  
19 questions.

20 HEARING OFFICER HALLORAN: Thank you,  
21 Mr. Harsch. Ms. Wheeler, cross.

22 MS. WHEELER: Thank you, Mr. Halloran.

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CROSS EXAMINATION

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BY MS. WHEELER:

Q. Mr. McClure, you've testified here today that you were hired specifically to perform an independent analysis in December of 2008; is that right?

A. I was asked to do that in December of 2008. My firm was engaged a few years ago, so I had some prior involvement through the settlement discussions.

Q. And, in fact, you said that you relied on some of those calculations that were done a couple years ago by your firm?

A. I reviewed it. I didn't rely on it. When I did my work, I essentially started over. I saw that other information, but then I --

Q. Because those numbers were different than yours?

A. Those numbers are different.

Q. But, in fact, a couple of them were the same scenarios where they came up with a different economic benefit?

A. Correct. I believe, as we discussed in my deposition, there were some timing

1 differences.

2 Q. They also discussed -- since you  
3 brought that up -- in your deposition that these  
4 alternative scenarios that you brought forth as ways  
5 to come into compliance had to have been available  
6 in 1997 and at that point you thought that they  
7 had -- could have moved to Michigan in 1997; is that  
8 right?

9 A. I believe at the time I was unclear as  
10 to what date the plant began operating and then  
11 subsequent to that I saw the date was difference  
12 than maybe what I thought it was.

13 Q. Well, Mr. Harsch told us in the  
14 deposition that it was in 1997, didn't he?

15 A. I don't recall that. I recall that I  
16 thought that the plant was open at that time and  
17 subsequent to that then I saw the date was somewhat  
18 later. But, again, as I explained, it really has no  
19 bearing on the scenario.

20 Q. You said that you got your cost inputs  
21 from Mr. Trzupsek and Mr. Piper; is that right?

22 A. Primarily from Mr. Trzupsek and then I  
23 had a discussion with Mr. Piper.

24 Q. How many discussions did you have with

1 Mr. Piper?

2 A. I recall one.

3 Q. And was that in person or on the  
4 phone?

5 A. On the phone.

6 Q. And didn't he basically confirm the  
7 estimate that you gave that you got from  
8 Mr. Trzupek?

9 A. Yes.

10 Q. You also said in your direct testimony  
11 today that of your three scenarios, the used RTO,  
12 the decommissioning of the press and moving it to  
13 Sparta, Michigan and the adjusted standard, the  
14 inputs that you got were all reasonable; how did you  
15 determine that?

16 A. Through my discussions with  
17 Mr. Trzupek in trying to get an understanding of how  
18 he calculated his costs, what the components were  
19 and how you can come up and just to try to, you  
20 know, make sure that we were -- we had the same  
21 understanding of the type of control efforts that we  
22 were talking about.

23 Q. Did you see any numbers from  
24 Mr. Trzupek other than his report that is now part

1 of your report?

2 A. Such as?

3 Q. Such as invoices and costs, bills,  
4 anything to back up the numbers that he gave you.

5 A. I have his report and discussions that  
6 I had with him.

7 Q. Again, I was a little confused by your  
8 testimony today because during the deposition I  
9 don't believe you ever mentioned the word -- or in  
10 your report -- refurbished RTO. Did you mention  
11 that it was refurbished before? It was always used,  
12 wasn't it? That's the way I thought it was.

13 A. I don't recall specifically.

14 Q. But as we've heard, refurbished and  
15 used are entirely different concepts in this  
16 machine, I guess?

17 A. There are differences, but you'd have  
18 to ask the experts exactly what those are.

19 Q. And you're not an expert in printing  
20 and/or the machinery used in printing processes; is  
21 that right?

22 A. Correct.

23 Q. You're a financial expert, right?

24 A. That's a very broad term.

1 Q. Okay. And you've done economic  
2 benefit analyses before, is that what you said?

3 A. Yes.

4 Q. And two of those cases are still  
5 pending? Well, three of them are still pending?

6 A. I suppose they're all still pending.

7 Q. Okay. Two are federal and one is the  
8 Toyal and one is this?

9 A. Correct.

10 Q. And, again, you've talked about a  
11 properly sized RTO, a refurbished RTO today and that  
12 was information you got from Mr. Trzupek, right?

13 A. What information?

14 Q. That it was -- what your determination  
15 was, you got the refurbished, properly-sized RTO  
16 information from Mr. Trzupek?

17 A. The cost and the annual operating  
18 costs of it, yes.

19 Q. You didn't do an analysis for the  
20 \$250,000 RTO, cost of the RTO that they actually  
21 used, right?

22 A. I did not do an analysis for the RTO  
23 that was installed later. Is that what you're --

24 Q. Right. The one --

1 A. I did not, correct.

2 Q. -- that was installed within that next  
3 year.

4 Just briefly, as you've stated,  
5 you used the risk-free rate and Mr. Styzens used the  
6 bank prime loan lending rate, I believe?

7 A. Correct.

8 Q. And you've said that the risk-free  
9 rate has been accepted by some courts and/or  
10 literature; is that right?

11 A. Yes.

12 Q. And the one court decision that you  
13 know of is which one?

14 A. The one that I provided is the WCI  
15 case, which is an Ohio case.

16 Q. And do you know of any other ones  
17 where it's been accepted by a court?

18 A. Not off the top of my head.

19 Q. Do you know that if it's ever been  
20 accepted by an Illinois Pollution Control Board  
21 decision?

22 A. I don't know that.

23 Q. Do you know that the WACC has been  
24 accepted by several court decisions and Illinois EPA

1 board decisions?

2 A. I'm aware that the WACC has been used  
3 in a number of cases and it's certainly a variable  
4 that's considered and I'm aware of the general  
5 status of the discord amongst professionals in the  
6 various fields.

7 Q. So as Mr. Harsch said, reasonable  
8 experts could disagree on that?

9 A. Yes.

10 Q. There was another -- I believe another  
11 difference, possibly minor, between yours and  
12 Mr. Styzens's report and that had to do with the  
13 marginal tax rate that was used. You used  
14 37 percent?

15 A. Correct.

16 Q. What did Mr. Styzens use, 33 percent;  
17 do you recall that?

18 A. Yes.

19 Q. Mr. Harsch also asked you today about  
20 the competitors to Packaging and leveling the  
21 playing field, he asked you about that today?

22 A. Yes.

23 Q. Do you know anything else about those  
24 three competitors such as if they are subject to

1 enforcement cases or have been forced to pay large  
2 fines?

3 A. I'm aware that they're subject to the  
4 same general environmental regulations that  
5 Packaging is.

6 Q. So you don't know anything else about  
7 them concerning their compliance history or  
8 subsequent penalties they may or may not have paid?

9 A. I'm generally aware they achieved  
10 adjusted standards and I'm aware that they've  
11 subsequently increased production and installed  
12 control devices.

13 Q. Also today you talked about management  
14 decisions and what needs to go into those management  
15 decisions, especially concerning what Mr. Imburgia  
16 testified to yesterday that they took into account  
17 that they wanted to be expand the business and they  
18 wanted to possibly have market penetration or some  
19 other reasons that they expounded on yesterday to  
20 make this decision to buy the larger RTO. You heard  
21 that testimony yesterday?

22 A. Yes.

23 Q. And you said that for purely economic  
24 decisions, they would have -- they wouldn't have



1 considered all of that or they wouldn't have  
2 considered compliance that was necessary, that  
3 was -- that's a separate issue?

4 A. I did not say that.

5 Q. Okay. I guess actually what I really  
6 want to ask is what is a purely economic decision by  
7 management?

8 A. The distinction I was making was  
9 between a decision where management is being  
10 compelled by a regulatory agency and one in which  
11 they are not.

12 Q. But management is always compelled to  
13 obey the law or a statute or regulations, aren't  
14 they?

15 A. In what capacity?

16 Q. When they're making any business or  
17 purely economic decision or any kind of management  
18 decision, they have to consider the law and the  
19 obedience to it, don't they?

20 A. I think generally, yes, companies want  
21 to be lawful.

22 Q. What part of the Federal Register did  
23 you rely on, because I don't believe that's in here?

24

1 (Whereupon, a discussion  
2 was had off the record.)

3 BY MS. WHEELER:

4 Q. You said that you also relied on the  
5 BEN Manual?

6 A. Yes.

7 Q. Directing your attention to 3.9 that  
8 you've just testified to, I believe Mr. Harsch was  
9 asking you about compliance costs components and you  
10 talked about number two; is that right?

11 A. Yes.

12 Q. But number one talks about what the  
13 best evidence of what the violator should have done  
14 is what he actually did do to achieve compliance;  
15 isn't that listed in number one?

16 A. Yes.

17 Q. Do you agree with that?

18 A. Generally, yes.

19 Q. And do you agree with the next  
20 sentence in that statement which says this rule is  
21 instructive in those cases where a violator may  
22 appear to be installing a more expensive pollution  
23 control system that EPA's staff believes is  
24 necessary to achieve compliance; do you agree with

1 that?

2 A. Generally, yes. I mean, it says what  
3 it says.

4 Q. And you relied on it you said?

5 A. I relied on the BEN Manual, yes. So  
6 in this case the best evidence of what the violator  
7 should have done is what it eventually did do, which  
8 we considered where they decommissioned their press.  
9 So that's what they did do. And so we looked at  
10 under the scenario where they shut down their press  
11 and ultimately moved it.

12 Q. But that didn't consider the fact that  
13 the other press was non-compliant?

14 A. I don't know those to be facts.

15 Q. You only know what you were given  
16 information from by Mr. Trzuppek; is that right?

17 A. What I understand about this case is  
18 that press four was a non-compliant press and then  
19 the information that we discussed earlier about the  
20 timeline for that press.

21 Q. Just one more question about your  
22 final numbers on your three scenarios. Did you  
23 include the interest from the time they should have  
24 come into compliance to today's date?

1 A. No. I could do that at any time.

2 Q. And that would be from -- your time  
3 frame was what, 2002 to 2009?

4 A. At whatever point you can determine --  
5 if a penalty is assessed, you can calculate interest  
6 any time. It's a simple calculation that can be  
7 done.

8 Q. But that's not included in your  
9 calculations yet?

10 A. Right.

11 MS. WHEELER: I have nothing else.

12 HEARING OFFICER HALLORAN: Thank you,  
13 Ms. Wheeler. Mr. Harsch, redirect.

14 MR. HARSCH: I have no further  
15 questions.

16 HEARING OFFICER HALLORAN: Thank you,  
17 Mr. McClure. You may step down. We'll go  
18 off the record for a moment.

19 (Whereupon, after a short  
20 break was had, the  
21 following proceedings  
22 were held accordingly.)

23 HEARING OFFICER HALLORAN: Back on the  
24 record. Packaging Personified, have you

1           rested in your case in chief?

2                   MR. HARSCH: Correct.

3                   HEARING OFFICER HALLORAN: All right.

4           I believe the State is going to put on a  
5           rebuttal witness. Mr. Grant.

6                               (Witness sworn.)

7   WHEREUPON:

8                               DAVID BLOOMBERG

9           called as a witness herein, having been first duly  
10          sworn, was examined and testified as follows:

11                               DIRECT EXAMINATION

12   BY MR. GRANT:

13           Q.       Mr. Bloomberg, you previously  
14          testified that you were involved in the adjusted  
15          standard petitions for Formel, Vonco and Bema,  
16          correct?

17           A.       Yes.

18           Q.       These companies contacted Illinois EPA  
19          regarding compliance with flexographic printing  
20          rules?

21           A.       Yes, they did.

22           Q.       And was that before Illinois EPA  
23          mailed the 1997 letter to all the printers?

24           A.       Yes, it was.

1           Q.       If you can look at Exhibit 57? It's  
2 Respondent's Exhibit 57. Did you hear Mr. Trzupke  
3 testify that he worked with you on developing these  
4 numbers?

5           A.       Yes.

6           Q.       Did you believe that the figures were  
7 a fiction for adjusted standard purposes or did you  
8 believe that they were accurate operating costs?

9           A.       I believe that they approximated  
10 accurate operating costs.

11          Q.       If you use RACT methodology, R-A-C-T,  
12 in calculating costs, should they differ greatly  
13 from real-world costs?

14          A.       No, they should not.

15          Q.       The lowest estimated cost of control  
16 in the adjusted standard petitions, either RACT or  
17 actual -- excuse me, if the lowest estimated cost of  
18 control in the adjusted standard petitions, either  
19 RACT or actual, were \$1,000 per ton for control  
20 costs for VOM, would Illinois EPA have supported the  
21 adjusted standard?

22          A.       Absolutely not.

23                   MR. GRANT: That's all.

24

1 HEARING OFFICER HALLORAN: Thank you.

2 Mr. Harsch, cross.

3 CROSS EXAMINATION

4 BY MR. HARSCH:

5 Q. Mr. Bloomberg, I understand some of  
6 your involvement. What was your relationship with  
7 Dave Kolaz?

8 A. Not sure what you mean by relationship  
9 with him.

10 Q. At the time when you were initially  
11 working on the tax force.

12 A. I was in the air quality planning  
13 section. I think Dave Kolaz, at the time, would  
14 have been the head of the compliance section.

15 Q. And is it fair to characterize your  
16 initial position in that -- your personal initial  
17 position to be opposed to the concept of an adjusted  
18 standard for these companies?

19 A. I would say initially, yes.

20 Q. And is it fair to characterize the  
21 position Mr. Kolaz, as head of compliance, that the  
22 Agency would, in fact, support such an adjusted  
23 standard?

24 A. I don't remember Mr. Kolaz's position.

1 Q. You don't remember much of my -- I'll  
2 withdraw that. I'm sorry.

3 A. It was a long time ago.

4 Q. Do you recall having discussions with  
5 Mr. Trzupsek regarding how he calculated these  
6 numbers?

7 A. I remember -- I don't remember  
8 specific discussions. I remember discussions in  
9 general.

10 Q. Despite your initial opposition, the  
11 Agency's official position was to support these  
12 adjusted standard positions?

13 A. There was a large -- a fairly large  
14 gap in time there we worked with the companies. My  
15 initial position was one of skepticism. And, you  
16 know, eventually the companies provided and we  
17 gathered enough information about their specific  
18 circumstances and the industry as a whole, more  
19 pertaining to them in particular, that my position  
20 changed. That's why we had the work group.

21 Q. Then do you have any -- you've sat  
22 here while Mr. Trzupsek has testified as to how US  
23 EPA arrives at a cost of control for reasonably  
24 available control technology or best available



1 control technology?

2 A. Yes.

3 Q. And do you agree that US EPA has made  
4 available tools for doing these calculations?

5 A. Yes.

6 Q. And that before it was a computer  
7 spreadsheet called --

8 MR. TRZUPEK: VataVuk, I believe.

9 BY MR. HARSCH:

10 Q. Before the current spreadsheet was put  
11 together, there was a written procedure?

12 A. There is a written procedure. I know  
13 that they update it. They updated it recently, for  
14 example, to include the new interest rate to better  
15 reflect reality because that is the point, to  
16 reflect reality as much as possible.

17 Q. And was it your understanding at the  
18 time that Mr. Trzupek had followed this prescribed  
19 methodology?

20 A. Yes, he did, as I understood it.

21 Q. And you had ample opportunity to  
22 review those costs?

23 A. Yes.

24 Q. You sat here today and yesterday and

1 heard about the gas usage for recirculating --  
2 excuse me, for RTO units --

3 A. Yes.

4 Q. -- in the printing industry,  
5 essentially being self-firing once the pilot  
6 temperature is brought up to speed?

7 A. That's what was claimed, yes.

8 Q. And do you have any experience or  
9 expertise to counter that?

10 A. I do not have any particular specific  
11 expertise or experience.

12 Q. Thank you.

13 MR. HARSCH: No further questions.

14 HEARING OFFICER HALLORAN: Thank you.

15 Mr. Grant.

16 MR. GRANT: Nothing.

17 HEARING OFFICER HALLORAN: Thanks you.

18 You may step down, Mr. Bloomberg. Anything  
19 further, Mr. Grant?

20 MR. GRANT: No.

21 HEARING OFFICER HALLORAN: Okay. The  
22 parties have indicated they wish to reserve  
23 their closing arguments for the post-hearing  
24 brief. Before we go off the record, I do

1 want to note for the Board and on record that  
2 there have been no members of the public here  
3 today, June 30th, or yesterday, June 29th,  
4 other than the parties themselves.

5 And I do want to note that I find  
6 no credibility issues with any of the  
7 witnesses who testified here today or  
8 yesterday, as well.

9 We have two housekeeping issues.  
10 We have Respondent's Exhibit No. 22, which I  
11 don't have as offered, and Respondent's  
12 Exhibit Group Exhibit 4A.

13 MR. HARSCH: Correct. I would like to  
14 move for admission of 4A.

15 MS. WHEELER: We have no objection.

16 HEARING OFFICER HALLORAN: Okay.

17 MR. HARSCH: And 22, I am --

18 MS. WHEELER: There's several that  
19 weren't offered and we would like to make  
20 sure they're not included as exhibits.

21 MR. HARSCH: Maybe we can go off the  
22 record and go through our list to make sure.

23 HEARING OFFICER HALLORAN: Okay.

24 We're off the record.

1 (Whereupon, after a short  
2 break was had, the  
3 following proceedings  
4 were held accordingly.)

5 HEARING OFFICER HALLORAN: We're back  
6 on the record. We discussed the briefing  
7 schedule. We determined that the transcript  
8 will be due and on the Board's website by  
9 July 14th, 2009.

10 Complainant's post-hearing brief  
11 is due August 21st, 2009. The Respondent's  
12 post-hearing brief is due September 25th,  
13 2009. The Complainant's reply, if any, is  
14 due on or before October 16th. Public  
15 comment is due on or before August 3rd.

16 Again, I think the parties have  
17 waived their closings and I do want to thank  
18 everybody for being so professional and  
19 cordial and, as always or almost always, it's  
20 been a pleasure. Thank you so much.

21 (Whereupon, a discussion  
22 was had off the record.)

23 HEARING OFFICER HALLORAN: We can open  
24 the record again. I forgot one thing, some

1 housekeeping. I just wanted to run through  
2 the exhibits that have been offered and  
3 admitted chronologically the way they were  
4 given to me.

5 It was agreed and admitted the  
6 Complainant's Exhibits 1 through 13 were  
7 admitted. They're in the white binder.  
8 Complainant's Exhibit 14 is loose. That was  
9 admitted.

10 Respondent's Exhibits 1 through 7,  
11 9 through 14, 16 through 21, 24, 26 through  
12 28, 32 through 39, 42 through 44, 50, 52, 55,  
13 56, Respondent's Exhibit No. 8, Respondent's  
14 Exhibit 23, Exhibit 40, 41, 45, 25, 29, 48,  
15 22, 57, 51, 50, 48, 49, Respondent's Group  
16 Exhibit 58 and also Respondent's Group  
17 Exhibit 4A. Those have all been admitted. I  
18 think that does it for the housekeeping.  
19 Thank you. Have a safe drive home.

20 (Which were all the proceedings  
21 had in the above-entitled cause  
22 on this date.)

23  
24

1 STATE OF ILLINOIS )  
 ) SS.  
2 COUNTY OF WILL )

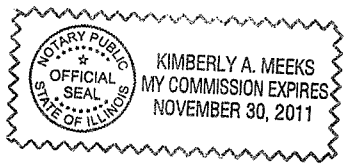
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I, Tamara Manganiello, CSR, RPR, do hereby certify that I reported in shorthand the proceedings held in the foregoing cause, and that the foregoing is a true, complete and correct transcript of the proceedings as appears from my stenographic notes so taken and transcribed under my personal direction.

Tamara Manganiello  
TAMARA MANGANIELLO, CSR, RPR  
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111

<b>A</b>				
<b>able</b> 78:7 83:1 130:12,13 131:4 138:10 138:18 139:14	117:8 150:9,17 150:20,24	<b>activities</b> 89:14 89:18,23	25:2,19 29:6 38:4 55:17 56:7,17 57:7 70:10,17 73:3 75:17 76:15,17 90:18,22,23 94:23,24 95:9 96:5,14,21 99:7 100:15 104:21 106:11 107:13 108:3 112:14,17 119:16 125:4 125:13 127:3,9 127:19 129:2 129:11 135:5 137:14 139:1 139:13,21 143:14,24 147:13 152:10 157:14 158:7 158:16,18,21 159:17,22 160:12	118:11 <b>affect</b> 120:9 <b>after</b> 7:9 14:16 14:17 20:13 24:8 25:18 35:18 59:17 66:5 84:5 91:15 103:3 104:4 114:4 126:24 143:7 156:19 164:1
<b>about</b> 8:15 10:19 16:10 17:23 33:13 37:19 44:17 47:17 52:14 54:14 55:2 65:5 68:22 74:17 75:10,17 77:8 78:20,21 79:11 80:16,18 83:9 87:22 89:15 92:8 93:24 94:1,16 102:11 104:12 104:13 108:23 111:17 116:23 125:14,16 127:9 130:7 132:22 133:8 135:21 139:20 140:23,24 141:5 147:22 149:10 151:19 151:21,23 152:6,13 154:9 154:10,12 155:17,19,21 160:17 162:1	<b>accepts</b> 45:5 <b>accommodate</b> 36:9 <b>accommodating</b> 136:12,16 <b>accordance</b> 79:9 80:3 <b>according</b> 19:18 <b>accordingly</b> 47:22 48:20 66:8 69:4 71:24 104:7 114:7 156:22 164:4 <b>account</b> 62:17 63:3,20,24 64:9 152:16 <b>accountant</b> 116:12 <b>accounting</b> 116:1 <b>accurate</b> 6:16 18:2 67:15 80:4 93:8 94:7 96:8,11 115:19 158:8,10	<b>actually</b> 5:3 16:16 17:21 18:8 22:24 41:23 54:5 72:15 78:18,22 79:21 89:17 94:1,21 97:16 100:4 101:4 103:24 149:20 153:5 154:14 <b>adapted</b> 22:14 <b>added</b> 137:20 138:1 <b>addition</b> 22:6 33:16 109:14 109:18,19 110:2,4 116:5 120:19 128:9 <b>additional</b> 43:10 45:15,19 46:6 47:9 49:1 71:5 84:5 127:20 128:11 135:3 135:16 136:13 139:3 143:24	119:16 125:4 125:13 127:3,9 127:19 129:2 129:11 135:5 137:14 139:1 139:13,21 143:14,24 147:13 152:10 157:14 158:7 158:16,18,21 159:17,22 160:12 <b>adjustments</b> 127:6 <b>administer</b> 63:3 <b>administration</b> 140:3 <b>admission</b> 46:15 46:19 163:14 <b>admitted</b> 6:13 46:23 64:12 65:18 72:1 105:2 165:3,5 165:7,9,17 <b>adopting</b> 106:1 <b>advantage</b> 60:19 <b>advice</b> 16:11 29:21 <b>advise</b> 8:17 13:21 76:23 86:7 96:21 <b>advised</b> 7:15 15:17 16:1 24:24 26:8 33:8 36:6 39:4 <b>advising</b> 97:10 <b>advisor</b> 56:2	<b>afterward</b> 46:20 <b>afterwards</b> 17:17 <b>again</b> 16:8 21:21 43:22 44:19 45:9 49:7 56:24 64:19 67:22 81:7 82:23,24 107:1 124:13 129:16 132:4 133:23 139:14 142:3 142:15,19,22 143:2 144:5,16 146:18 148:7 149:10 164:16 164:24 <b>against</b> 33:8 117:13 <b>agency</b> 19:14 22:4 23:10,24 24:1,23 25:2 25:19 28:5,11 28:22 29:3,16 36:23 37:6 38:10 40:12,15 40:22 41:4 42:5 43:6,9,18 45:5,10 47:9 49:2,4 56:13 66:13 82:13 86:3,14 89:4 90:18 109:1 110:15 141:6 141:13 142:19 153:10 159:22 <b>Agency's</b> 160:11 <b>ago</b> 45:16 46:9
<b>above</b> 85:22 99:8 <b>above-entitled</b> 1:10 165:21 <b>absolutely</b> 86:13 86:16 108:16 108:20 128:4 158:22 <b>accept</b> 72:17 76:10,12 <b>accepted</b> 17:2 19:14 23:11 39:17 41:5 59:4 65:12 84:9 108:10,14 110:15 115:9	<b>action</b> 28:6 42:5 45:12,14 46:8 49:14 60:13,15 87:24 88:3 <b>actions</b> 47:17	<b>addressing</b> 123:8 <b>add-on</b> 15:14 143:21,23 <b>adhering</b> 123:13 123:14 <b>adjust</b> 135:3 <b>adjusted</b> 5:15 6:8 15:10 24:1 24:11,18,22	<b>advising</b> 97:10 <b>advisor</b> 56:2	

64:20 69:22 118:23 127:8 145:8,13 160:3 <b>agree</b> 32:24 46:20 51:15 61:4 62:5 69:24 74:21 76:21 79:12 92:10 97:14 140:16,21 154:17,19,24 161:3 <b>agreed</b> 36:7 165:5 <b>agreement</b> 90:4 <b>agrees</b> 91:6 <b>ahead</b> 70:4 82:18 <b>air</b> 4:20 10:5 56:1 66:16 105:19 159:12 <b>allegations</b> 48:1 <b>alleged</b> 48:13 <b>allow</b> 36:13 71:23 86:3 <b>allowable</b> 42:21 <b>allowed</b> 12:6 20:10 60:19 <b>allowing</b> 136:2 <b>allows</b> 17:15,15 <b>almost</b> 35:21 164:19 <b>alone</b> 78:1 <b>along</b> 95:6 102:15 <b>already</b> 8:23 9:21 10:2 34:16 61:13 75:14 91:2 102:19 <b>alternative</b> 124:1 126:5,11 127:18 128:22 135:8,12 146:4 <b>alternatives</b> 13:23,24 14:3 124:5,12,21 125:1,15,17 126:21	<b>although</b> 13:12 20:11 46:19 64:3 <b>always</b> 140:20 148:11 153:12 164:19,19 <b>ambiguous</b> 88:1 <b>American</b> 116:13,16,19 <b>amongst</b> 138:15 151:5 <b>amount</b> 17:8,10 18:7 22:21 27:7 42:22 58:6 62:2 93:6 99:8 123:12 135:10 139:6 <b>amounts</b> 129:11 131:3 <b>ample</b> 161:21 <b>analogous</b> 139:5 <b>analyses</b> 55:24 132:15 149:2 <b>analysis</b> 30:24 31:4 40:21 97:15,16 99:15 107:10 115:4 117:6 118:3,9 120:6,10,15 128:15 143:23 145:5 149:19 149:22 <b>analyzed</b> 58:5 <b>Andersen</b> 140:11 <b>and/or</b> 123:16 148:20 150:9 <b>annual</b> 11:10,10 11:16 12:12 15:3 26:17 53:10 126:3 129:3,8,17 134:13 143:7 149:17 <b>annualized</b> 58:24 <b>annually</b> 99:9 <b>another</b> 32:6 37:5 59:20	79:16 97:19 99:11 102:6 112:5,6 135:7 143:14 151:10 151:10 <b>answer</b> 58:4 87:15 138:7,9 <b>answering</b> 113:5 136:12 <b>anybody</b> 108:2 <b>anyone</b> 40:11 51:23 69:19 117:17 <b>anything</b> 65:6 96:23 113:17 148:4 151:23 152:6 162:18 <b>anyway</b> 65:22 <b>anywhere</b> 96:20 97:9 100:18 <b>apart</b> 27:20 29:9 35:12 <b>appeal</b> 49:9 <b>appear</b> 154:22 <b>Appeared</b> 2:7 2:12 <b>appears</b> 9:11 30:21 166:8 <b>applicability</b> 90:1 <b>applicable</b> 27:23 94:2,3 144:1 <b>application</b> 10:6 10:15,24 19:10 19:11 26:15 36:17,20 37:5 38:8 41:2,12 41:21,23 42:2 42:7 45:10,13 47:3 48:5,6 49:5,6 83:10 83:12 84:6,12 86:2,19,24 87:22 88:15,17 88:19 89:5 90:5 98:23 <b>applications</b> 10:11 47:5	48:2 <b>applied</b> 48:5 54:10 73:11 76:19 106:20 125:6 <b>applies</b> 73:13 <b>apply</b> 54:11 63:16,16 73:21 89:23 <b>applying</b> 127:18 <b>apprise</b> 24:15 <b>apprised</b> 29:2 33:19 <b>approach</b> 119:16 134:18 136:8 <b>approached</b> 5:16 <b>approaches</b> 132:12 <b>appropriate</b> 48:2 97:16 99:12 109:3 125:24 128:14 129:23 133:6 138:13 139:6 139:13,19 143:15 144:3 <b>appropriately</b> 139:10 <b>appropriate-si...</b> 119:13 <b>approve</b> 56:15 <b>approved</b> 80:23 81:4 <b>approximate</b> 18:9 <b>approximated</b> 158:9 <b>approximately</b> 3:12 114:9 122:6 126:1 129:1 130:21 <b>area</b> 5:7 37:16 37:18 73:8 74:23 94:5,6,9 <b>areas</b> 105:20 134:3 <b>argument</b> 134:9	<b>arguments</b> 162:23 <b>Argus</b> 59:21,22 59:23 60:2 66:17,19 68:3 68:14 104:12 104:13 <b>ARI</b> 39:3,5 <b>arising</b> 128:19 <b>arithmetic</b> 99:3 <b>around</b> 5:7 22:20 34:24 61:23 144:17 <b>arranged</b> 39:4 <b>arrived</b> 126:24 <b>arrives</b> 160:23 <b>art</b> 112:9 <b>Arthur</b> 140:11 <b>articles</b> 128:12 128:16 <b>aside</b> 3:12 <b>asked</b> 7:1 8:14 13:24 57:11 58:2 87:23 88:2 90:9 118:1 142:21 145:7 151:19 151:21 <b>asking</b> 80:16,17 81:23 83:9 154:9 <b>aspects</b> 118:12 <b>assessed</b> 138:2,3 156:5 <b>assessment</b> 33:1 <b>assigned</b> 3:7 <b>assist</b> 9:3 105:24 <b>assistance</b> 7:2 62:15 <b>assisted</b> 9:14 18:6 39:5 119:2 <b>associated</b> 33:1 100:22 129:9 <b>assume</b> 52:10 65:8 76:21 89:1 103:19 105:3 131:24 <b>assuming</b> 5:14
--	--	--	---	---



144:2	103:15 108:16	60:16 68:7	33:19 34:15	135:19
<b>assumption</b>	123:19 135:23	78:12 97:12	48:14 51:21	<b>best</b> 6:16 60:2
113:5	151:2,4 152:3	139:5 141:23	57:14 58:2,15	106:22 107:2
<b>attached</b> 51:13	152:9,10	142:12	59:19 61:12	130:14 154:13
82:11	<b>away</b> 92:3	<b>bearing</b> 146:19	77:16 88:2	155:6 160:24
<b>attempt</b> 5:18	<b>A.D</b> 166:20	<b>became</b> 83:17	101:1 111:6	<b>beta</b> 133:18
94:9	<b>a.m</b> 1:13 3:12	144:2	114:13 123:19	<b>better</b> 22:1
<b>attempted</b> 5:23		<b>BECKER</b> 2:6	132:23 135:1,4	161:14
96:24	<b>B</b>	<b>become</b> 42:14	138:4 139:10	<b>between</b> 19:3
<b>attempting</b> 7:19	<b>back</b> 3:2 24:9	86:12 106:17	140:21 145:23	31:24 88:12
7:22,23 78:10	30:14 32:19	131:5 138:16	146:9 148:9	100:12 102:20
<b>attention</b> 6:4,10	47:19 57:23	<b>becomes</b> 86:5,5	150:6 151:10	111:2 123:13
9:6 11:13	66:4,9 88:12	107:11	153:23 154:8	135:10,15
38:12 39:8	89:3,6 104:8	<b>before</b> 19:15	157:4 158:6,8	151:11 153:9
46:1 51:9	112:14 113:24	24:18 63:22	158:9 161:8	<b>beyond</b> 32:8
64:11 98:6	114:3,8,10	73:15 76:18	<b>believed</b> 26:10	94:10
115:7 154:7	122:3 124:13	91:15 92:10	74:13	<b>BIDDLE</b> 2:8
<b>attitude</b> 8:10	127:10 130:23	105:11 108:13	<b>believes</b> 154:23	<b>bifurcate</b> 136:15
<b>attorney</b> 2:2	131:8,13 148:4	148:11 149:2	<b>bells</b> 107:9	<b>big</b> 35:7 100:12
9:13	156:23 164:5	157:22 161:6	<b>below</b> 52:20	134:11
<b>ATUs</b> 62:18	<b>background</b>	161:10 162:24	<b>Bema</b> 5:15 24:4	<b>biggest</b> 52:8
<b>August</b> 37:7	115:23	164:14,15	29:10,14,20	<b>bill</b> 54:15
41:24 66:22	<b>BACT</b> 55:24	166:20	55:17 137:10	<b>bills</b> 148:3
164:11,15	57:1 59:2	<b>beforehand</b>	157:15	<b>binder</b> 84:19
<b>authorized</b> 64:1	107:10	75:24 122:21	<b>BEN</b> 118:15	121:3,10 122:5
<b>available</b> 12:5	<b>balance</b> 19:12	<b>began</b> 8:23	128:6 134:18	122:13,23
27:6,8 34:4	112:7	146:10	134:18 136:13	165:7
60:6 69:18	<b>bank</b> 133:8	<b>begin</b> 84:7	136:18,20	<b>binders</b> 6:5
105:14,16	150:6	<b>beginning</b>	137:6 154:5	<b>birthday</b> 3:13
106:22 107:3	<b>Base</b> 62:3	124:11,15	155:5	3:13
124:22 126:13	<b>based</b> 12:19	131:8	<b>benchmark</b>	<b>bit</b> 93:24 95:10
126:22 146:5	20:23 21:6	<b>behalf</b> 2:7,12	59:21 95:11,14	126:18 130:6
160:24,24	26:9 30:1 31:4	26:14 45:22	<b>benchmarks</b>	131:3
161:4	38:18 47:13	46:7 50:14	60:23 69:10	<b>black</b> 6:4 115:7
<b>average</b> 15:1	51:6 53:3	117:24	<b>benefit</b> 53:6	122:13
133:7,9,16,20	55:22 57:15	<b>behind</b> 115:8	117:5,16,18	<b>bleed</b> 17:11
<b>averaging</b> 14:9	58:5 61:3	<b>being</b> 18:23	118:4,18	<b>blip</b> 61:24
14:19,23	96:16 105:23	51:18 65:12	121:16 123:1,4	<b>Bloomberg</b> 6:2
<b>avoided</b> 127:18	107:4 112:13	71:13 78:22	123:10,15	18:19 29:10
129:18 134:13	125:11,24	83:22 93:15,17	124:4,18	56:12 57:4
<b>avoiding</b> 123:16	137:11	96:10 100:24	126:19 127:1	60:23 69:12
127:14 129:8	<b>baseline</b> 64:4	142:18 153:9	127:21 128:5,8	107:20 108:4,7
<b>aware</b> 19:20	98:13	162:5 164:18	128:21 129:12	108:10,16
20:17 42:8,9	<b>basically</b> 17:14	<b>belief</b> 6:17	131:15 132:7	109:1 157:8,13
44:5 45:14	88:8 91:14	<b>believe</b> 3:18	132:13 136:7	159:5 162:18
46:9 57:3	92:18 94:11	7:11 13:11	143:13,16,23	<b>Bloomberg's</b>
71:15 72:11	97:7,10 121:17	15:10 18:6	144:10,13,15	33:1 76:5
73:5 75:15,23	125:1 127:16	23:7,22 24:14	145:22 149:2	<b>blower</b> 61:10,17
76:14,18	147:6	29:14 30:4	<b>besides</b> 100:23	<b>blown</b> 23:3
	<b>basis</b> 15:3 47:16			

<b>BMW</b> 32:19,19	<b>built</b> 28:12 133:10 136:2	113:4,11 121:16 128:3 128:19 143:14 156:6	100:2 114:13 115:5 117:11 117:13,19,19 117:24 118:2 118:12,14,19 118:21,23 119:1,1 120:13 121:12 124:7 128:12 134:1 134:10 138:18 138:23 139:7 139:17 144:17 150:15,15 155:6,17 157:1	44:17 <b>changed</b> 94:15 143:19 160:20 <b>changes</b> 135:5 <b>characterizati...</b> 98:17 140:17 <b>characterize</b> 33:24 47:13 72:21 88:14 100:19 159:15 159:20 <b>characterized</b> 49:15 69:10 71:16 79:14 <b>cheap</b> 142:18 <b>check</b> 63:21 85:4 <b>chemist</b> 4:13,14 <b>Chicago</b> 1:23 2:4,10 5:7 <b>chief</b> 3:16,17 114:13 157:1 <b>choice</b> 79:21 <b>choose</b> 138:16 138:16 <b>chooses</b> 79:2 <b>chose</b> 103:12 <b>Christopher</b> 2:5 114:17,24 122:6 <b>chronologically</b> 165:3 <b>circumstances</b> 19:14 103:4 143:18 160:18 <b>claim</b> 64:3 <b>claimed</b> 162:7 <b>claiming</b> 100:16 101:17 <b>clarification</b> 137:4 <b>clarify</b> 88:5 <b>Clean</b> 10:5 66:16 105:19 <b>clear</b> 57:14 58:16 69:8 139:5 <b>clearly</b> 108:11 <b>client</b> 33:5 59:24
<b>board</b> 1:1,22 3:7 5:13 24:19,22 30:7,12 48:16 68:21 69:3 71:23 73:15 96:10,12,21,24 97:1,4,8 98:3,5 98:12,14 99:7 100:14 105:11 106:10 112:16 115:22 117:12 138:5 150:20 151:1 163:1	<b>burdensome</b> 68:23 <b>burn</b> 21:20 <b>burned</b> 18:12 <b>burner</b> 53:16 <b>burners</b> 52:10 52:17 <b>business</b> 4:16 32:15 33:15 34:3,6,17 35:8 36:10 63:22 67:5 73:18 116:3 140:2,4 152:17 153:16 <b>businesses</b> 137:20 140:6,9 <b>buy</b> 32:6 36:8 152:20 <b>buying</b> 32:19 33:2 35:6	<b>calculations</b> 57:11 127:10 131:24 134:21 145:12 156:9 161:4 <b>calibrated</b> 80:6 <b>call</b> 27:8 75:8 <b>called</b> 4:3 52:18 56:1 114:18 125:20 157:9 161:7 <b>came</b> 7:8 8:10 25:11 45:15 58:11,13 63:18 70:17 71:17 84:13 91:15 93:2 97:4,20 97:22 105:18 111:7 124:23 145:21 <b>capacity</b> 136:13 153:15 <b>capital</b> 51:6 129:1,5,17,19 133:7,10,16,20 134:12 135:20 136:1 143:6 <b>capture</b> 16:14 18:5,10,13,14 22:9,13 40:4 80:19 81:1,3,6 82:7 <b>captured</b> 22:22 <b>card</b> 63:22 <b>care</b> 62:18 <b>Carol</b> 34:20 35:11,20 36:5 72:24 118:6 <b>case</b> 3:16,17 24:14 29:14,15 30:4,21 32:8 32:18 48:15 49:11 51:21 52:16 61:12 70:1 89:1	<b>cases</b> 19:6 30:15 73:15 78:13 106:11 117:21 118:17 139:16 149:4 151:3 152:1 154:21 <b>cash</b> 133:4,5,12 133:14 <b>catalytic</b> 32:12 59:18 70:8,24 <b>cause</b> 88:23 165:21 166:6 <b>central</b> 13:12,13 <b>cents</b> 53:20 61:22 <b>certain</b> 21:13 35:21 58:21,22 78:17,19,19 128:14 137:16 <b>certainly</b> 17:6 19:13 73:14 97:5 112:12 141:1 142:14 151:3 <b>certification</b> 116:17 <b>certified</b> 32:20 116:11,14,16 <b>certify</b> 166:5 <b>CFE</b> 116:8,14 <b>CFF</b> 116:17 <b>CFN</b> 116:8 <b>chance</b> 25:1 71:6 <b>change</b> 42:20	
<b>Board's</b> 6:7 164:8 <b>book</b> 6:5 27:14 115:8 <b>books</b> 115:8 <b>both</b> 13:11,12,13 16:15 17:24 113:9 129:17 133:24 134:10 <b>bought</b> 100:4 101:7 <b>Bradley</b> 1:24 3:5 <b>break</b> 65:19,22 66:6 104:5 114:1,5 156:20 164:2 <b>brief</b> 57:22 82:4 93:22 162:24 164:10,12 <b>briefing</b> 164:6 <b>briefly</b> 4:12,19 14:8 15:7 58:3 115:23 116:21 132:22 134:22 150:4 <b>bring</b> 9:20 14:24 127:13 <b>broad</b> 148:24 <b>brought</b> 111:23 146:3,4 162:6 <b>BTU</b> 53:14,16 <b>build</b> 36:5 130:13 133:19 <b>building</b> 34:24 <b>buildup</b> 119:10	<b>C</b> C 2:1 <b>CAAPP</b> 8:24 10:10,14,24 26:15 28:6 41:12 42:6 47:2 48:4,6 49:5 63:2 64:6 83:9,11 84:12 84:19 89:18 98:22 99:19 <b>calculate</b> 58:17 123:12 124:4 127:1,23 128:20 156:5 <b>calculated</b> 89:24 108:18,24 113:3 117:16 117:18 118:17 127:21 128:8 147:18 160:5 <b>calculates</b> 144:10 <b>calculating</b> 106:22 132:12 133:20 158:12 <b>calculation</b> 45:1			

86:8	<b>company</b> 32:6,7	120:14	81:6 96:12	<b>conservative</b>
<b>clients</b> 33:8	34:5 36:2	<b>completion</b>	109:14	52:1,4 95:14
141:2	72:20 94:6	41:10	<b>complying</b> 27:22	97:3 132:5
<b>climate</b> 124:20	124:23 125:2	<b>complex</b> 73:17	109:19 110:3	<b>consider</b> 81:9
<b>close</b> 100:18	125:16,19	<b>compliance</b> 8:18	110:10 140:17	85:17,18 110:9
<b>closed</b> 91:12	126:2,6,22	9:20 11:19	<b>component</b>	112:10,11
<b>closing</b> 162:23	127:13,15,18	13:17,20 15:13	123:9 136:21	153:18 155:12
<b>closings</b> 164:17	130:24 133:18	16:10 18:23	<b>components</b>	<b>considerable</b>
<b>coating</b> 43:5	133:21 136:2	19:3,8,18 40:1	123:7 147:18	40:9
<b>code</b> 112:3,6,6	<b>compare</b> 18:8	40:6 56:2	154:9	<b>consideration</b>
<b>codified</b> 22:14	<b>compared</b> 22:22	60:17 74:13	<b>computer</b> 161:6	33:16 34:14
<b>colleague</b> 118:24	22:23 51:6	75:11,13,14,16	<b>conceded</b> 48:10	107:14 131:16
<b>color</b> 13:14	99:11 107:11	76:24 77:5,9	<b>concentration</b>	<b>considered</b> 4:24
<b>Combined</b> 71:3	109:12	77:10,18,19,22	17:16,22	15:7 151:4
<b>come</b> 25:10	<b>comparing</b>	77:23 78:2,3,6	<b>concept</b> 105:13	153:1,2 155:8
55:13 73:15	96:18 112:19	78:8 80:10	106:20 123:1,2	<b>considering</b>
75:16 95:10	<b>comparison</b>	81:10,17 82:21	123:4 138:14	31:10
98:9 102:5	98:11 113:10	89:12 90:24	159:17	<b>consist</b> 82:12
107:10 123:5	<b>compelled</b> 141:6	92:5,7,23 96:6	<b>concepts</b> 96:15	<b>consistent</b> 54:16
130:12 141:3	142:18 153:10	102:5,13	148:15	54:19 141:19
146:5 147:19	153:12	111:21 119:24	<b>concerning</b> 5:11	<b>consists</b> 121:17
155:24	<b>compete</b> 140:24	120:4,17 123:6	50:17 152:7,15	<b>constraint</b>
<b>comes</b> 100:17	<b>competition</b>	123:18 124:10	<b>concerns</b> 27:21	141:14
<b>coming</b> 17:8	138:15 141:2	124:12 125:8	110:2	<b>constructed</b>
22:23 71:3	<b>competitors</b>	125:17,18,20	<b>conclude</b> 11:21	29:11 56:18
114:10	24:3 124:21	127:2 129:10	13:16 15:22	<b>construction</b>
<b>commenced</b>	125:5,12	129:24 131:2	18:12	19:23 20:20
8:19	137:10 138:20	132:19 134:20	<b>conclusion</b> 31:5	28:10,13,17,24
<b>commencing</b>	139:15,18	135:11 136:11	93:19	36:16,24 37:6
1:12	151:20,24	136:16,21	<b>condition</b> 19:19	38:8 39:1 41:1
<b>comment</b> 35:22	<b>Complainant</b>	139:24 141:5	37:14,21 86:6	41:6,9,10
46:20 134:9,15	1:4 2:7 3:9	141:13 142:8	86:13	42:11,12 43:7
134:16,17	<b>Complainant's</b>	143:8 146:5	<b>conditions</b> 22:4	43:11,19,23
164:15	104:23 105:2	152:7 153:2	137:16	44:5,10,11,19
<b>commit</b> 142:19	164:10,13	154:9,14,24	<b>conduct</b> 38:23	48:12
<b>common</b> 22:17	165:6,8	155:24 157:19	39:20 118:3	<b>consultant</b> 5:22
<b>commonly</b> 5:1	<b>complaint</b> 48:7	159:14,21	<b>conducted</b> 39:3	119:7 140:5,9
<b>communities</b>	<b>complete</b> 11:1,2	<b>compliant</b> 11:23	124:7	<b>consulted</b> 5:5
128:17	11:8 20:19	12:9,18 13:19	<b>conducting</b> 22:1	<b>consulting</b> 4:16
<b>community</b> 77:3	23:1 38:8	14:24 15:1	118:10	67:4 115:2,4
<b>companies</b> 5:16	40:13 81:10	18:19 76:2	<b>conferences</b>	117:1
67:24 75:10,18	83:20,22	78:11,18 131:5	23:15	<b>contacted</b> 7:3,9
75:21 76:13,15	114:23 166:7 -	138:17	<b>confirm</b> 147:6	76:7,11 157:18
76:16,17	<b>completed</b> 20:14	<b>complicated</b>	<b>confirmed</b> 15:11	<b>contain</b> 44:20
107:18 123:5	<b>completely</b>	7:24 8:1 74:20	<b>confused</b> 148:7	<b>contained</b> 121:2
137:19 138:16	53:12 81:5	74:22 75:1	<b>confusion</b> 63:10	122:18,21
139:4 153:20	<b>completeness</b>	<b>complied</b> 26:10	76:8	136:18
157:18 159:18	11:6 28:7 84:6	<b>comply</b> 5:18	<b>conservatism</b>	<b>contains</b> 121:10
160:14,16	<b>completes</b>	76:1,1,8 77:20	131:7	<b>contemplates</b>

133:16	152:12 154:23	100:11 101:5,6	143:20 144:3	<b>crapshoot</b> 32:9
<b>contemplating</b>	158:15,18,19	101:10,11	144:13 146:20	<b>created</b> 22:21
133:21	160:23,24	103:5,6,8,9,13	149:17,20	123:3
<b>content</b> 11:24	161:1	103:14,23	158:15,17	<b>creates</b> 126:18
27:5 87:12	<b>controlled</b> 13:18	107:19,22	160:23	<b>credibility</b> 163:6
92:21 93:5	58:6 59:2	109:13 111:1,9	<b>costs</b> 10:20	<b>criteria</b> 133:19
<b>context</b> 39:23	101:4,23 102:3	111:18,22	50:24 51:3,6	<b>criticized</b> 18:19
59:2 96:9	141:8	117:15 122:15	52:5 53:10	<b>CRO</b> 70:7
97:15,17	<b>controlling</b> 14:5	122:16,19,24	54:22 57:2	<b>cross</b> 65:23 72:7
100:24 112:1	100:10,23,24	124:2 130:5	58:5,20 59:21	72:8 144:21
140:17	<b>converting</b> 5:17	131:12,14,21	60:24 61:2	145:1 159:2,3
<b>continued</b> 3:3	15:6	132:6 133:1	70:18 95:15	<b>crossed</b> 83:17
6:22 10:3	<b>copies</b> 67:15	137:7 145:23	96:5 100:1,7	<b>cross-line</b> 14:9
46:16	<b>copy</b> 6:15 39:11	148:22 149:9	100:16,22,23	14:19,23
<b>continuing</b>	49:24 67:20	150:1,7 151:15	104:1 106:4	<b>CSR</b> 166:4,11
116:6	97:19 115:19	157:2,16	108:17 119:13	<b>current</b> 60:8
<b>control</b> 1:1,22	121:20 122:14	163:13 166:7	119:14,18	62:24 128:18
3:7 5:2 14:6	137:6	<b>correcting</b> 50:8	123:17 125:9	161:10
15:15 18:16	<b>cordial</b> 164:19	<b>correspondence</b>	126:11,18,23	<b>currently</b> 4:10
20:1 22:22	<b>corporate</b> 35:12	43:10 88:12,15	126:24 129:8	62:12 87:22
24:19 30:7	117:4 141:21	<b>cost</b> 50:17 51:5	129:18 130:2,7	<b>curriculum</b>
31:12 32:1,16	<b>corporation</b> 1:7	51:12 52:1,8,9	130:8,9,13,23	115:17,20
33:2,6 35:2	<b>correct</b> 6:3 7:7	53:5,17 55:10	131:13 134:4	121:11
40:4 51:5 52:2	15:16 23:6	55:21,23 56:4	134:13 136:1,1	<b>cut</b> 142:17
52:9 54:23	26:13,16,19,22	56:10,21,22	136:15 142:17	
55:21,23 56:18	28:8,13,14	58:3,6,9,11,13	143:7,22	<b>D</b>
58:6,9,11,12	29:23 33:23	58:17 59:1,3	147:18 148:3	<b>data</b> 9:1 69:11
58:13,17,22	38:2,6 39:7	70:6,8 71:12	149:18 154:9	69:15 71:12,17
59:1,3,10	42:24 47:4,7	71:16 94:18,23	158:8,10,12,13	71:19 92:19
60:21 69:16	47:11 50:22	97:9,21,23	158:20 161:22	109:5 132:18
70:22 72:12	55:12 56:9	98:7 99:5,6,8	<b>counsel</b> 81:20	<b>database</b> 27:10
79:4,5,9,13,18	58:9,17 62:13	99:14 100:14	90:17 118:14	67:2,3,11,13
79:22 95:19	64:10,22 68:24	100:21 102:8,9	124:8	<b>date</b> 28:1 64:7
97:21,23 98:7	72:13 74:15	102:22 103:16	<b>counter</b> 162:9	120:11,12
99:5,6,8	75:12 76:24	103:22 106:9	<b>country</b> 5:8	134:21,24
100:14,14	77:17 78:5	106:16,16	<b>County</b> 94:12	135:1 137:9
101:9,18	79:24 80:17	107:4,11	166:2	139:2 146:10
102:21,23	81:1 82:18,19	112:17 113:9	<b>couple</b> 96:15	146:11,17
103:16 105:11	82:21,22 83:12	119:11,16	111:14 127:7	155:24 165:22
105:14,16,22	83:13,24 84:3	124:1 126:1,14	145:13,20	<b>dated</b> 8:20 37:7
106:9,22	84:11,17 85:23	127:5,8,11,11	<b>course</b> 27:6 28:5	41:23 46:5
112:16,17	86:21 87:5,6,9	127:18 129:4	34:8 62:23	50:4 66:17,19
113:12 117:12	87:17 88:9,10	129:16 130:20	63:4 126:3	66:21
125:22 128:21	88:24 89:21	132:18 133:7	<b>court</b> 150:12,17	<b>dates</b> 50:8 144:2
136:2,9,11	90:5,19,20	133:10,16,20	150:24	<b>Dave</b> 159:7,13
137:15,20	91:3,4,7,17,19	134:12 135:21	<b>courts</b> 150:9	<b>DAVID</b> 157:8
138:1 143:12	92:12,16,22,24	136:8,21	<b>covers</b> 136:22	<b>day</b> 1:12 14:17
143:20,24	94:13,14,24	138:22 140:20	<b>CPA</b> 116:7,11	42:2 85:12
147:21 150:20	95:1,7,21 99:9	141:1,10 143:6	<b>CPAs</b> 116:13,19	86:20 124:14
				166:20

82:17 85:13 86:21 <b>de</b> 126:15 <b>deal</b> 10:18 35:18 74:8 108:12 143:10 <b>dealer</b> 32:19 <b>dealt</b> 30:10 74:6 <b>debt</b> 133:17 <b>December</b> 39:21 111:3 118:1 145:5,7 <b>decided</b> 16:4 25:24 35:19 103:4 109:8 126:11 139:2 <b>decision</b> 35:16 36:4 77:21 126:17 140:20 141:5,8,10,11 141:23 142:6 142:13,15 150:12,21 152:20 153:6,9 153:17,18 <b>decisions</b> 6:7 16:10 77:22 140:14,14,22 140:23,23,24 141:1,15,20,21 150:24 151:1 152:14,15,24 <b>decommission</b> 131:4 <b>decommission...</b> 124:15 155:8 <b>decommission...</b> 119:14 130:18 135:8 144:14 147:12 <b>dedicated</b> 14:6 <b>deemed</b> 11:7 83:20,22 <b>defined</b> 87:19 <b>defines</b> 86:3 <b>definitely</b> 61:1 <b>degree</b> 115:24 116:2 140:1 <b>delayed</b> 129:5	<b>delaying</b> 123:16 <b>deliver</b> 52:16 <b>deliverables</b> 9:24 <b>delivers</b> 57:1 <b>demonstrate</b> 22:9 79:9 80:18,24,24 81:6,17 82:7 96:6 111:21 <b>denial</b> 37:2,3 <b>denied</b> 28:15,17 <b>deny</b> 36:23 <b>depended</b> 77:23 <b>depending</b> 10:16,21 61:14 92:23 <b>deposition</b> 102:11 121:14 142:23 145:24 146:3,14 148:8 <b>Des</b> 60:11 <b>describe</b> 4:19 115:22 <b>described</b> 13:1 55:20 63:8 82:10 136:23 <b>describes</b> 123:11 <b>designated</b> 114:10 <b>designation</b> 116:12,15 <b>designations</b> 116:6 <b>desire</b> 142:11,17 <b>despite</b> 35:23 160:10 <b>destroy</b> 16:3 <b>destroying</b> 16:5 <b>destruction</b> 16:16 18:3,15 21:14 22:7 -42:16 81:14 <b>detailed</b> 10:19 <b>details</b> 10:20 144:6 <b>determination</b> 11:3,7 12:6 28:7 112:2	149:14 <b>determine</b> 17:17 19:5,17 59:3 77:4 147:15 156:4 <b>determined</b> 10:24 11:8 18:14 81:14 126:21 143:12 143:13 164:7 <b>determines</b> 82:14 <b>determining</b> 40:1 89:24 106:14,21 138:6 <b>develop</b> 22:15 35:8 50:23 51:2 55:22 58:8,24 <b>developed</b> 40:19 58:21,21 70:9 96:17 98:13 99:23 106:5 <b>developing</b> 96:4 105:24 106:9 158:3 <b>development</b> 59:5 105:23 106:4 107:4,12 108:19 113:13 <b>developmental</b> 109:10 <b>device</b> 14:6 20:1 22:22 32:1,1,6 32:16 33:3,6 35:2 52:2 54:23 56:18,23 59:10 70:8,14 70:16,22,24 79:14,22 95:19 95:24 96:3 102:21,24 103:17 128:21 136:2,9,11 138:2 143:20 143:21 <b>devices</b> 5:2 31:13 152:12	<b>dictates</b> 82:14 <b>differ</b> 21:11 158:12 <b>difference</b> 19:2 31:24 32:4 54:18 141:4 143:8 146:11 151:11 <b>differences</b> 36:13 132:12 132:17 135:18 135:18 143:4,5 146:1 148:17 <b>different</b> 4:24 5:4 27:9,15 60:10 70:16,22 76:1 84:20 90:2 127:6 141:9 145:17 145:19,22 148:15 <b>differing</b> 134:7 <b>difficult</b> 35:24 <b>difficulty</b> 51:22 <b>direct</b> 4:5 106:8 114:20 125:12 139:14 147:10 157:11 <b>Directing</b> 154:7 <b>direction</b> 125:12 166:9 <b>directives</b> 106:21 <b>directly</b> 70:19 <b>director</b> 117:2 <b>directs</b> 123:21 123:24 <b>disagree</b> 83:5 99:12 151:8 <b>disclosed</b> 69:21 <b>disconnect</b> 100:12 <b>discord</b> 151:5 <b>discount</b> 132:21 132:22 135:19 <b>discounted</b> 143:3 <b>discounts</b> 134:4 <b>discuss</b> 28:24	<b>discussed</b> 21:22 23:20 29:5,5 33:9 56:11 118:11 125:4,9 125:19 145:23 146:2 155:19 164:6 <b>discussing</b> 33:10 124:24 133:4 <b>discussion</b> 24:7 35:18 57:6 97:5 108:21,23 109:7 113:22 121:5 122:1 146:23 154:1 164:21 <b>discussions</b> 23:23 24:8 28:21 31:18,20 34:1 36:12 56:14 57:4 104:14 108:12 118:10,14 124:8 130:11 145:10 146:24 147:16 148:5 160:4,8,8 <b>distinction</b> 153:8 <b>divided</b> 59:1 <b>document</b> 9:10 41:16 55:8,13 55:16,19 64:16 71:12 115:15 <b>documentation</b> 56:11 64:2 118:15 <b>documents</b> 66:15,24 67:7 69:18 105:24 106:4 107:4 113:13 121:12 121:15,18 122:20,22 124:7 128:10 128:18 129:14 <b>doing</b> 21:7 40:9 73:3 82:16 102:24 103:1
---	--	--	--	---

108:13 124:22	18:9	152:23 153:6	40:16 41:1	78:12,15 80:21
128:3 161:4	<b>drying</b> 101:5,8	153:17	44:20 63:5	82:16 110:13
<b>dollar</b> 58:22	101:13,15,16	<b>economics</b>	73:9 77:11	111:17,20,24
131:3	101:21 102:3,6	102:24	79:22 85:5	112:5,10
<b>dollars</b> 10:22	102:23 103:1	<b>editorial</b> 46:19	89:24 90:10	<b>enjoyed</b> 118:5
127:8,10,12,12	<b>due</b> 164:8,11,12	<b>educational</b>	92:20 99:18	123:16 129:7
129:7 131:1,7	164:14,15	115:23 116:7	101:24	<b>enough</b> 17:20
135:7	<b>duly</b> 4:3 114:18	116:22	<b>emit</b> 94:10	35:5,7 160:17
<b>Dominic</b> 7:10,18	157:9	<b>effect</b> 77:15	109:16	<b>ensured</b> 17:6
8:13 15:11	<b>DuPage</b> 94:12	<b>efficiency</b> 18:15	<b>emitted</b> 16:3	<b>entered</b> 34:16
16:1,11 35:19	<b>during</b> 18:7	18:15 21:20	<b>emitting</b> 30:19	<b>entertaining</b>
36:6	21:16 22:3	22:7,9,13	<b>employed</b> 4:10	34:16
<b>Dominic's</b> 7:11	28:21 36:11	42:16 80:19	62:12 115:1	<b>entire</b> 52:11
8:7 35:22	40:11 43:18	81:1,3,6,14	118:16 119:11	92:19 131:1
<b>done</b> 19:4 21:3	57:7 74:14	82:7	<b>employees</b> 72:24	<b>entirely</b> 141:10
26:5 34:22	138:19 148:8	<b>efficient</b> 16:5,13	73:4,5	148:15
48:7 65:20	<b>dying</b> 102:18	71:1	<b>enclosure</b> 22:19	<b>entities</b> 68:17
78:1,4,14,15		<b>effort</b> 10:14	23:2 34:24	<b>entitled</b> 3:8
79:24 90:12	<b>E</b>	<b>efforts</b> 46:16	35:1,5 36:6	122:5
98:8 113:11	<b>E</b> 2:1,1	50:14 147:21	102:14	<b>entity</b> 35:12,13
125:17 126:12	<b>each</b> 17:16,18	<b>eight</b> 61:22	<b>encountered</b>	<b>environmental</b>
145:12 149:1	27:7 82:12	73:10	43:2	4:11,16 23:10
154:13 155:7	<b>earlier</b> 5:10 57:9	<b>eight-color</b> 34:4	<b>encourage</b> 123:5	23:24 28:11,22
156:7	111:24 129:20	34:6,7	<b>end</b> 14:14 27:19	29:3 34:10
<b>doubt</b> 21:8	155:19	<b>either</b> 32:14	28:2 120:12,13	38:10 39:3
139:21	<b>early</b> 24:8 25:11	42:6 49:3	120:14 124:16	40:12 73:21
<b>down</b> 14:7 15:1	33:19 91:24	80:23 81:5	134:23 135:1	123:18,20
15:14 25:24	92:1	119:6 158:16	<b>ended</b> 126:8	133:15 140:18
33:14,22 54:8	<b>early-on</b> 91:22	158:18	<b>ending</b> 120:8	152:4
64:24 65:6	<b>earned</b> 127:14	<b>electric</b> 100:5	<b>enforceable</b>	<b>environmenta...</b>
91:7,8,12 92:2	<b>earth</b> 102:20	<b>electrical</b> 61:6	37:12,24 41:12	117:4
107:10 111:3	<b>easily</b> 27:18 93:4	61:11,21	66:18,20 86:5	<b>envision</b> 128:23
120:8,11 143:2	<b>easy</b> 138:22	<b>electricity</b> 51:7	109:17	<b>EPA</b> 5:3,23 11:1
155:10 156:17	139:15	<b>eligible</b> 106:18	<b>enforcement</b>	11:8 16:8,15
162:18	<b>economic</b> 53:6	<b>Elmhurst</b> 1:11	30:14 49:10	17:12,12 20:6
<b>downward</b>	117:5,16,18	<b>emission</b> 11:10	60:13,15 152:1	23:16 24:10
95:10	118:4,18	11:16,16 16:9	<b>Enforcement-...</b>	25:9 30:23
<b>drafted</b> 110:15	121:16 123:1,3	17:18,24 19:6	1:6	36:14 38:14
<b>drafting</b> 9:15	123:10,15	19:12 20:9	<b>engaged</b> 115:3,4	39:17 41:19
<b>drafts</b> 108:4	124:4,17	26:17,21 38:9	145:8	51:4 52:10
<b>draw</b> 6:4,10 9:6	126:19 127:1	38:15,18 42:15	<b>engagements</b>	53:1 55:21
11:13 38:12	127:21 128:4,7	42:17 48:13	117:3,3	56:24 57:16
39:8 46:1 51:9	128:15,20	62:16 63:19	<b>engineering</b>	58:7,16 60:7
61:14,21 64:11	129:12 131:15	83:16 87:18	16:12,19,23	67:1,10,12
115:7	132:7,13 136:7	90:8 110:11	17:5 19:3,4,9	68:17 72:12
<b>DRINKER</b> 2:8	138:2 140:23	112:3	20:24 21:3,8	76:22 80:23,23
<b>drive</b> 2:9 61:13	141:5 143:12	<b>emissions</b> 7:23	23:12,20 26:9	81:5,5 82:14
165:19	143:15,23	9:2 12:12	31:7 40:21	82:17 83:20
<b>dryer</b> 16:4,13	144:10,13,15	30:24 37:20	70:13 77:11	87:24 88:9,12
	145:22 149:1			

88:22 89:4	62:16	<b>everyone</b> 3:2	6:15 8:22 9:9	<b>expensive</b> 71:2
90:4 95:6 97:6	<b>estimate</b> 52:23	114:3	10:8 11:5,14	154:22
104:17 105:17	55:11,22 56:20	<b>everything</b>	17:2 31:2	<b>experience</b> 4:20
105:18,22	56:21 61:18	32:22 84:7	36:19,21 37:9	6:20 12:19
106:5,9,21	77:11 78:12,15	<b>evidence</b> 6:13	38:12 39:9	15:8 21:6,7
107:1,21	80:21 104:1	12:15 65:1,9	41:15 42:1,3	47:14 48:23
108:10 109:9	111:24 112:5	71:20 97:7	44:2,14,24	59:17 62:3
113:4,12	112:10 119:15	104:22 108:6	45:1,9,17 46:2	73:14 116:22
121:14 123:3	125:11,24	154:13 155:6	46:4 49:24	125:11 162:8
123:11 128:5,5	127:5 130:20	<b>evolves</b> 128:12	50:5,10 51:9	162:11
128:13 129:14	135:14 147:7	<b>exact</b> 15:2	55:4 64:12	<b>expert</b> 4:24 8:5
130:8 134:2,3	<b>estimated</b> 42:13	136:22	65:1,4,15,18	21:21 49:21,24
134:15,17	53:3 99:6	<b>exactly</b> 70:9,11	67:20 72:1	50:4,8,12
135:24 150:24	127:7 158:15	80:7 81:13	95:2 100:6	115:4 117:8
157:18,22	158:17	138:21 139:18	104:23 105:2	122:5 148:19
158:20 160:23	<b>estimates</b> 51:13	148:18	115:10,12,17	148:23
161:3	52:1,1 56:5,10	<b>examination</b> 4:5	121:3,9,10	<b>expertise</b> 162:9
<b>EPA's</b> 77:1	56:15 110:13	5:10 57:9 72:8	122:8,13,14,18	162:11
89:20 154:23	111:17,20	105:8 111:15	122:23 137:3	<b>experts</b> 148:18
<b>EPCRA</b> 74:1	119:11 129:16	113:1 114:20	158:1,2 163:10	151:8
<b>equal</b> 138:15	<b>estimations</b> 53:5	145:1 157:11	163:12,12	<b>explain</b> 5:12
<b>equate</b> 53:23	<b>evaluate</b> 11:18	159:3	165:8,13,14,14	6:11,12,13
127:12	13:6 18:4	<b>examine</b> 119:18	165:16,17	17:4 19:2 20:3
<b>equipment</b>	<b>evaluating</b> 92:5	<b>examined</b> 4:4	<b>exhibits</b> 6:5	21:15 22:11
10:20 31:22	103:3,11	59:15 114:19	43:16 46:15,23	32:4 58:3
32:2,9,14,21	<b>evaluation</b> 16:19	157:10	65:3 69:22	85:24 115:15
33:9,11 86:4	17:5 23:20	<b>examiner</b>	71:5 163:20	116:9 117:23
100:5 103:7,11	26:9 31:8	116:15	165:2,6,10	121:8 124:3
103:12 125:18	40:21 82:17	<b>Examiners</b>	<b>exist</b> 8:2 69:20	132:11
125:20 129:10	<b>evaluations</b>	116:16	89:21 93:2	<b>explained</b> 21:18
137:15,21	20:24 21:4,8	<b>example</b> 52:21	<b>existed</b> 23:4	52:13 124:6
<b>equipped</b> 111:4	23:12	110:22 113:9	25:15,17 27:5	139:23 141:19
<b>equity</b> 133:17	<b>even</b> 15:3 35:20	136:11 161:14	27:11 56:23	146:18
<b>erase</b> 123:15	84:5 90:6	<b>exceed</b> 37:15	<b>existing</b> 40:4	<b>explains</b> 20:7
<b>erect</b> 22:20	126:13	<b>exceeds</b> 106:17	<b>expand</b> 152:17	<b>explanation</b>
<b>ERMS</b> 27:21	<b>event</b> 3:15,19	<b>exception</b> 86:7	<b>expanded</b> 32:15	143:15
38:20,22 63:3	<b>eventually</b> 34:18	120:4	137:19	<b>expounded</b> 61:9
64:7	109:8 155:7	<b>excess</b> 99:8	<b>expansion</b> 94:5	<b>expounded</b>
<b>especially</b> 4:21	160:16	<b>exclude</b> 89:17	<b>expect</b> 28:10	152:19
104:12 152:15	<b>ever</b> 23:7,9	<b>exclusively</b> 26:3	54:4 86:14	<b>express</b> 113:7
<b>essentially</b> 9:14	25:10 28:16	<b>excuse</b> 6:11 25:7	98:12,14	<b>expressed</b> 109:2
36:12 50:12	33:5 35:7 36:9	41:9 77:7	<b>expended</b>	<b>extend</b> 134:21
52:22 64:8	59:12 60:3	123:24 158:17	123:17 124:19	<b>extent</b> 132:20
70:13 105:17	103:21 148:9	162:2	<b>expenditure</b>	<b>extruder</b> 13:3
111:8 123:14	150:19	<b>exemption</b> 89:22	129:6 143:6	
125:7 127:5	<b>every</b> 59:6 86:8	<b>exemptions</b> 90:9	<b>expenditures</b>	<hr/>
130:24 145:15	116:7	<b>exhaust</b> 22:21	133:15 142:20	<b>F</b>
162:5	<b>everybody</b> 91:6	22:24	<b>expense</b> 40:9	<b>facility</b> 9:20
<b>establishment</b>	164:18	<b>exhibit</b> 6:11,12	126:4	10:17,19,21
				35:21 72:13
				84:13 118:7

<b>fact</b> 8:6,11 9:23 16:18 21:12 29:11 30:1 31:5 33:7 56:20 57:5 59:12 60:24 69:14 78:14,15 78:22 79:5 88:16 101:9 107:17 108:22 120:7 131:18 134:14 138:5 138:20 142:11 145:11,20 155:12 159:22	<b>feeling</b> 139:12 <b>FESOP</b> 41:21 42:2,7 43:23 45:10,13 47:5 49:5 87:22 88:8,18,19 89:8,21 90:5 <b>few</b> 45:15 92:8 107:9 118:22 145:8 <b>fiction</b> 158:7 <b>field</b> 137:24 138:14 139:11 151:21 <b>fields</b> 151:6 <b>figure</b> 16:16 54:11 <b>figured</b> 112:3 <b>figures</b> 98:15 113:9 158:6 <b>figuring</b> 92:6 <b>file</b> 8:16 27:14 <b>files</b> 66:13 <b>fill</b> 7:22,23 <b>final</b> 6:7 35:16 42:5 49:14 88:3 155:22 <b>finance</b> 116:1,3 128:16 140:3 <b>financial</b> 116:18 133:18 148:23 <b>find</b> 5:18,23 7:13 12:14 67:7 69:3 73:18 74:17 77:4 119:20 141:17,19 163:5 <b>fines</b> 152:2 <b>fire</b> 54:6 <b>firing</b> 53:23 <b>firm</b> 145:8,13 <b>first</b> 4:3 7:1,13 7:20 8:7 25:11 36:23 41:21 44:4,6,18 47:2 62:24 66:16 69:21 71:15 91:18 93:2	103:20,21 114:18 115:8 125:3 157:9 <b>fit</b> 110:4,5,6 <b>five</b> 12:1 13:7,10 15:20,21,23,24 16:14,17 17:7 21:10 23:4,12 26:2,10 31:8 33:15 34:22 35:2,5 37:21 39:20 40:4,7 40:14 77:12,16 77:24 78:4,11 78:16 85:13 86:20 101:4,18 102:2,9,14,19 102:19 110:14 111:4,6 112:4 120:1,17,21 131:20 135:7 142:7 143:11 143:13 144:8 <b>flammability</b> 92:19 <b>flexo</b> 75:9,9,24 <b>flexographic</b> 5:7 5:19,24 6:23 12:20 15:9 26:11 27:23 30:6,11 61:4 62:4 72:11 75:8 79:20 92:11,15 157:19 <b>flow</b> 17:15 <b>flows</b> 133:4,5,12 133:14 <b>fluid</b> 74:7 <b>focus</b> 30:14 <b>focused</b> 120:5 <b>focussed</b> 117:2 <b>follow</b> 29:21 51:19 80:22 81:2,14 82:6 82:11 107:8 128:2 <b>followed</b> 81:7,8 81:13 161:18	<b>following</b> 19:24 24:12 30:22 33:21 38:7 39:21 41:8,9 51:22 66:7 104:6 114:6 156:21 164:3 <b>follows</b> 4:4 114:19 157:10 <b>force</b> 107:15 159:11 <b>forced</b> 152:1 <b>foregoing</b> 166:6 166:6 <b>forensics</b> 116:18 <b>forgot</b> 164:24 <b>form</b> 27:12,13 74:2 93:1,7 102:7 <b>formal</b> 19:24 45:12 77:18,19 77:22 78:1,3,6 78:22 112:8 <b>format</b> 107:7 <b>Formel</b> 5:15 24:4 29:10,14 29:17 30:16 55:2,17 56:18 59:9,12 66:21 68:12 70:7,17 73:2,6 94:22 101:1 112:16 137:10 157:15 <b>former</b> 60:11 <b>forms</b> 7:19,21 7:24 8:24 <b>formula</b> 130:9 <b>forth</b> 88:12 89:3 89:6 122:23 146:4 <b>forward</b> 34:11 63:5 127:13 131:13 139:1 139:24 <b>found</b> 8:10 12:18 21:11 31:2 36:19 37:9 43:16 44:2 50:4,10	<b>founded</b> 36:2 <b>four</b> 13:7,10,17 13:18 14:1,5,6 14:8 17:12 25:21,24 26:3 26:5 31:11,13 33:14,22 39:21 50:21 52:2 53:20 73:9 91:5,7,20 92:2 98:24 100:10 111:2 120:5,7 122:7 129:24 131:20 143:14 143:24 144:14 155:18 <b>fourth</b> 3:19 <b>frame</b> 24:6 28:23 33:20 47:12,13 48:24 119:4 131:9 144:9 156:3 <b>frankly</b> 69:17 <b>fraud</b> 116:14,16 <b>free</b> 140:22 <b>frequently</b> 20:11 <b>from</b> 3:4 5:24 21:11 23:10 25:9 27:20 29:9 31:21 32:6,19 35:12 55:14 59:21 61:5 64:8 67:1 69:8,11 70:17 73:9 78:17 87:16 89:22 93:16 98:9 106:15 115:24 116:3,20 118:23 119:2 121:14 124:14 124:14,24 128:16 129:14 131:19,22 135:23 146:21 146:22 147:7 147:23 149:12 149:16 155:16 155:23 156:2
---	---	---	--	--



158:13 166:8 <b>front</b> 117:11 <b>frustrated</b> 8:4 <b>fugitive</b> 22:21 22:24 <b>full</b> 4:8 18:20 23:3 61:19 73:17 78:16 102:13 <b>fully</b> 81:4 <b>full-blown</b> 19:8 21:9,13,17 22:3 34:21 39:20 40:5 <b>further</b> 111:10 113:17 137:18 144:18 156:14 162:13,19 <b>future</b> 56:21 133:11,22 136:3,17	81:19 100:15 <b>give</b> 16:15 65:22 82:3 106:14 <b>given</b> 107:3 110:20 142:24 155:15 165:4 <b>gives</b> 79:20 85:9 <b>go</b> 7:19,19 30:14 40:8 70:4 72:19 113:20 135:6 152:14 156:17 162:24 163:21,22 <b>goal</b> 123:10 124:17 <b>goes</b> 21:20 107:1 <b>going</b> 8:8 17:10 18:8 20:7,8 25:19 32:9 36:3 40:3,6 47:15 49:7 52:24 53:2 54:12 63:5 64:3 65:21,23 71:23 77:8,9 77:20,24,24 79:4 81:11 89:3,6 102:15 104:20 112:14 114:1 122:4,7 142:15,16,21 157:4 <b>gone</b> 32:15,20 <b>good</b> 3:1 35:18 36:8 108:12 124:9 <b>gotten</b> 24:9 <b>governed</b> 141:10 <b>graduation</b> 116:20 <b>grant</b> 2:5 5:11 14:16 16:22 24:22 28:1,3 43:19 44:8 46:18 47:15 48:4,18 49:7 57:9 65:22,24 67:21 68:1,5,7 68:11 69:1,21	70:5,6 71:19 72:7,9 81:23 82:3,5,23 83:4 83:8 88:4,7,23 90:11 93:12,21 93:23 95:2,4 97:12 98:18,20 98:21 104:2,10 104:19 105:3,5 106:7 111:13 111:14,16 112:21,23 113:6,17,18 157:5,12 158:23 162:15 162:16,19,20 <b>granted</b> 28:11 60:18 68:16 83:23 88:9 112:16 116:18 137:14 <b>granting</b> 6:8 <b>Grant's</b> 109:22 <b>gravity</b> 123:8 <b>great</b> 10:17 <b>greater</b> 109:16 <b>greatly</b> 158:12 <b>gross</b> 138:12 <b>group</b> 5:17,22 6:1 67:19 71:24 76:3 122:8,18,23 137:3 160:20 163:12 165:15 165:16 <b>growth</b> 136:3,17 <b>guess</b> 32:18 75:19 80:15 90:6 93:11 96:16 111:7,23 134:22 148:16 153:5 <b>guidance</b> 106:21 128:3,4,7,11 128:13 129:13 129:15 131:10 134:2 135:23 136:5 <b>guidelines</b>	105:23 113:13 118:16 <b>guys</b> 88:16 90:13 <hr/> <b>H</b> <hr/> <b>h</b> 123:22 <b>half</b> 46:9 <b>Halloran</b> 1:24 3:1,5 14:12 46:22 47:18,23 48:16,19 49:12 49:17 57:20,23 65:3,8,11,17 65:21 66:3,9 68:5,10,19 69:2,6,24 70:4 71:8,21 72:3,6 82:1 98:18 104:3,8 105:1 105:6 111:12 112:22 113:16 113:19,24 114:8 115:11 122:3 137:1 138:8 144:20 144:22 156:12 156:16,23 157:3 159:1 162:14,17,21 163:16,23 164:5,23 <b>hammer</b> 85:15 <b>handle</b> 129:24 <b>happen</b> 34:18 <b>happened</b> 34:19 62:20 <b>Happens</b> 43:4 <b>happy</b> 3:13 <b>HAPs</b> 37:17 <b>hard</b> 61:15 <b>Harsch</b> 2:11 3:14,20,21 4:6 14:18 28:2,4 44:11,13 46:14 47:1,23,24 49:12,13,18,20 57:18 58:1 64:15,23 65:7 65:10,13,19	66:1,11 67:18 69:5,8 70:2,3 71:8,10 72:2,4 72:5 81:18 82:23 83:7 87:23 88:2,6 98:16 104:12 104:24 105:7,9 111:10,13 112:23 113:2 113:14,15,17 114:21 115:13 115:14 121:4,7 121:21 122:9 122:10,12 123:23 137:5 139:8 144:18 144:21 146:13 151:7,19 154:8 156:13,14 157:2 159:2,4 161:9 162:13 163:13,17,21 <b>Harsch's</b> 3:13 <b>having</b> 4:3 14:14 35:1 48:1 78:11 109:14 110:2 112:12 114:18 157:9 160:4 <b>hazardous</b> 73:23 74:14,22 <b>head</b> 54:10 74:11 150:18 159:14,21 <b>hear</b> 64:8 72:23 158:2 <b>heard</b> 74:12 76:5 148:14 152:20 162:1 <b>hearing</b> 1:24 3:1 3:3,6 14:12 46:22 47:18,23 48:16,19 49:12 49:17 57:20,23 59:16 64:23 65:3,8,11,17 65:21 66:3,9 67:19 68:5,10
---	--	---	--	---

68:19 69:2,6 69:24 70:4,10 71:8,17,21 72:3,6 82:1 96:21 98:18 99:7 104:3,8 104:22 105:1,6 111:12 112:22 113:16,19,24 114:8 115:11 122:3 137:1 138:8 144:20 156:12,16,23 157:3 159:1 162:14,17,21 163:16,23 164:5,23	<b>home</b> 36:3 165:19 <b>honestly</b> 90:10 <b>hook</b> 142:7 <b>hooked</b> 111:4 120:21 144:8 <b>hopes</b> 100:14 142:7 <b>horsepower</b> 61:19,19 <b>hour</b> 1:13 17:23 53:16 <b>hours</b> 54:1 85:10 86:3,11 86:12,20,20,23 <b>housekeeping</b> 163:9 165:1,18 <b>Huff</b> 7:6,6 63:20 63:20 <b>huh</b> 89:8 <b>hundred</b> 20:16 60:19 135:7 <b>hydraulic</b> 74:7 <b>hypothetical</b> 143:22	41:19 58:8 67:2,10,12 68:17 72:12 76:22 80:23 81:5 82:17 83:20 87:24 88:9,12,22 89:4,20 90:4 95:6 97:5 104:17 107:21 108:10 121:14 123:20 142:9 150:20,24 157:18,22 158:20 166:1 <b>Imburgia</b> 7:11 13:1 21:18 52:13 152:15 <b>impact</b> 52:8 <b>implications</b> 34:10,10 <b>important</b> 123:2 <b>impression</b> 13:12,13 91:19 <b>inability</b> 76:8 <b>inaction</b> 63:15 63:17 <b>inaudible</b> 68:4 <b>Inc</b> 1:6 3:10 66:21 <b>inches</b> 122:7 <b>incidentally</b> 22:15 <b>include</b> 31:20 117:5 126:11 135:24 136:1 155:23 161:14 <b>included</b> 118:9 118:19 119:12 126:17 128:15 130:22 131:7 132:19 156:8 163:20 <b>includes</b> 135:12 <b>including</b> 5:1 121:12 <b>increase</b> 42:21 94:15 135:9,13 135:15 139:2	<b>increased</b> 22:4 152:11 <b>incremental</b> 135:5 <b>independent</b> 118:3 145:5 <b>index</b> 127:11,11 <b>indicate</b> 45:4 140:19 <b>indicated</b> 162:22 <b>indicates</b> 136:14 <b>indicating</b> 130:24 <b>indifferent</b> 123:13 <b>individual</b> 15:13 <b>indoor</b> 74:9 <b>industries</b> 66:21 <b>industry</b> 4:17,22 5:2,3 12:20 15:9 43:5,5 52:15 62:4 75:7 101:22 160:18 162:4 <b>informal</b> 16:12 112:11,13 <b>information</b> 10:18,19 16:15 25:9 27:11,15 27:17 31:12 40:18 41:1 43:10 45:15,20 46:6 47:9 49:1 49:2 50:17 51:18 54:21 70:9,12 84:1,2 84:5 85:6,7 86:19 90:9 93:9,15,17 94:19 96:11 98:22 103:16 107:5 119:5 145:16 149:12 149:13,16 155:16,19 160:17 <b>informed</b> 34:8 62:22 <b>initial</b> 7:8 88:18	88:20 129:1 159:16,16 160:10,15 <b>initially</b> 7:3 8:10 50:3 109:2 159:10,19 <b>ink</b> 13:5 18:7 26:1 27:7 42:13,19,22 44:17 92:22 93:5 <b>inks</b> 11:23,23 12:9,16,17,18 12:21 13:11,19 14:21,22,24 15:4,4,6 16:1 27:6 76:2 87:11,16 <b>inline</b> 13:2 <b>input</b> 132:18,19 135:20,21 <b>inputs</b> 134:12 143:6 146:20 147:14 <b>insignificant</b> 89:14,18,23 <b>inspection</b> 27:18 91:15 <b>inspector</b> 7:15 27:13 93:4 <b>install</b> 15:14 53:9 60:3 77:17 101:8 102:4 103:4 137:15 142:6 <b>installation</b> 20:1 109:23 135:12 <b>installed</b> 38:24 59:9,12,17 62:9 63:1,4 69:16 70:7,12 70:19 79:24 95:20,23 101:9 102:18 125:19 136:9 149:23 150:2 152:11 <b>installing</b> 128:21 154:22 <b>instead</b> 34:20
<b>hearings</b> 5:15 <b>heating</b> 54:7 <b>held</b> 1:11 66:8 104:7 114:7 156:22 164:4 166:6 <b>helped</b> 22:15 86:24 <b>hesitating</b> 93:12 <b>hierarchy</b> 77:21 <b>high</b> 13:5 52:5 52:19 53:13 96:13,16,23 97:11,15 98:4 109:4 <b>higher</b> 13:15 14:24 21:14,19 21:24 57:1,2 126:19 <b>him</b> 64:1 83:3 88:2 90:17 119:2 138:7 140:19 148:6 159:9 <b>hire</b> 39:5 <b>hired</b> 145:4 <b>historically</b> 40:17 <b>history</b> 30:24 83:17 152:7 <b>hold</b> 116:5 <b>hole</b> 63:14	<b>I</b> <b>IAC</b> 5:19 <b>idea</b> 68:13 87:10 96:10 <b>identical</b> 95:24 96:3 <b>identified</b> 91:20 <b>identify</b> 66:15 138:19 <b>ideology</b> 123:5 <b>IEPA</b> 21:21 64:9 107:24 <b>ignorance</b> 77:6 <b>II</b> 74:2 <b>Illinois</b> 1:1,3,7 1:12,22,23 2:3 2:4,10 3:6,9 5:23 11:1,8 20:6 23:10,16 23:24 25:9 28:10,22 29:2 30:23 36:14 37:24 38:10,14 39:16 40:12	<b>Imburgia</b> 7:11 13:1 21:18 52:13 152:15 <b>impact</b> 52:8 <b>implications</b> 34:10,10 <b>important</b> 123:2 <b>impression</b> 13:12,13 91:19 <b>inability</b> 76:8 <b>inaction</b> 63:15 63:17 <b>inaudible</b> 68:4 <b>Inc</b> 1:6 3:10 66:21 <b>inches</b> 122:7 <b>incidentally</b> 22:15 <b>include</b> 31:20 117:5 126:11 135:24 136:1 155:23 161:14 <b>included</b> 118:9 118:19 119:12 126:17 128:15 130:22 131:7 132:19 156:8 163:20 <b>includes</b> 135:12 <b>including</b> 5:1 121:12 <b>increase</b> 42:21 94:15 135:9,13 135:15 139:2	<b>increased</b> 22:4 152:11 <b>incremental</b> 135:5 <b>independent</b> 118:3 145:5 <b>index</b> 127:11,11 <b>indicate</b> 45:4 140:19 <b>indicated</b> 162:22 <b>indicates</b> 136:14 <b>indicating</b> 130:24 <b>indifferent</b> 123:13 <b>individual</b> 15:13 <b>indoor</b> 74:9 <b>industries</b> 66:21 <b>industry</b> 4:17,22 5:2,3 12:20 15:9 43:5,5 52:15 62:4 75:7 101:22 160:18 162:4 <b>informal</b> 16:12 112:11,13 <b>information</b> 10:18,19 16:15 25:9 27:11,15 27:17 31:12 40:18 41:1 43:10 45:15,20 46:6 47:9 49:1 49:2 50:17 51:18 54:21 70:9,12 84:1,2 84:5 85:6,7 86:19 90:9 93:9,15,17 94:19 96:11 98:22 103:16 107:5 119:5 145:16 149:12 149:13,16 155:16,19 160:17 <b>informed</b> 34:8 62:22 <b>initial</b> 7:8 88:18	88:20 129:1 159:16,16 160:10,15 <b>initially</b> 7:3 8:10 50:3 109:2 159:10,19 <b>ink</b> 13:5 18:7 26:1 27:7 42:13,19,22 44:17 92:22 93:5 <b>inks</b> 11:23,23 12:9,16,17,18 12:21 13:11,19 14:21,22,24 15:4,4,6 16:1 27:6 76:2 87:11,16 <b>inline</b> 13:2 <b>input</b> 132:18,19 135:20,21 <b>inputs</b> 134:12 143:6 146:20 147:14 <b>insignificant</b> 89:14,18,23 <b>inspection</b> 27:18 91:15 <b>inspector</b> 7:15 27:13 93:4 <b>install</b> 15:14 53:9 60:3 77:17 101:8 102:4 103:4 137:15 142:6 <b>installation</b> 20:1 109:23 135:12 <b>installed</b> 38:24 59:9,12,17 62:9 63:1,4 69:16 70:7,12 70:19 79:24 95:20,23 101:9 102:18 125:19 136:9 149:23 150:2 152:11 <b>installing</b> 128:21 154:22 <b>instead</b> 34:20

<b>Institute</b> 116:13 116:19	163:9	<b>Kellogg</b> 116:3 116:20	<b>known</b> 25:15 133:5,14,14	<b>lectured</b> 5:3
<b>instructive</b> 154:21	<b>items</b> 48:24 49:3 49:3 62:7	<b>Keppner</b> 41:19	139:20	<b>led</b> 15:10
<b>instrument</b> 63:3	<b>It'd</b> 61:24	<b>kept</b> 63:9	<b>Kolaz</b> 159:7,13 159:21	<b>legal</b> 77:1 93:13 93:16 128:16
<b>intended</b> 9:19	<b>J</b>	<b>Kevin</b> 21:23,24	<b>Kolaz's</b> 159:24	<b>legitimate</b> 19:13
<b>intention</b> 18:22	<b>January</b> 8:21	<b>key</b> 124:7	<b>L</b>	<b>lending</b> 150:6
<b>interest</b> 40:15 155:23 156:5 161:14	<b>job</b> 17:8 27:8	<b>kilowatt</b> 61:22	<b>label</b> 122:4	<b>length</b> 89:7 <b>less</b> 30:2,20 37:21 38:1 45:6 53:2 86:16 87:14 100:8 103:2 111:8
<b>interested</b> 34:9	<b>jobs</b> 36:1	<b>kind</b> 33:19 34:13 68:22 89:17 124:22 153:17	<b>labor</b> 51:7	<b>lesser</b> 132:20
<b>interim</b> 47:6	<b>Joe</b> 7:11 13:1 15:11 16:2 18:6 35:19	<b>Kinsley</b> 63:23	<b>LAER</b> 94:1,6 110:10	<b>let</b> 72:18 84:18 88:4 97:1 101:2
<b>internal</b> 67:13	<b>Joseph</b> 21:18 52:13	<b>knew</b> 25:16 35:23 77:20 90:8	<b>laminator</b> 101:1	<b>letter</b> 9:15,17,17 9:19 10:1 16:22 17:3 37:2,3 38:14 42:1 51:11 76:9,11,18 157:23
<b>investigate</b> 124:20	<b>judgment</b> 13:19 81:11,12	<b>know</b> 7:16 8:13 13:15 14:5,8 15:2 16:9 19:12 32:15 34:3,9 35:8,15 35:23 37:12 40:16,17 51:23 53:14,19 54:9 54:13 59:14,24 60:5 61:21 64:5 71:21 74:6,19,24 75:3,19 76:10 76:20 77:1 78:24 79:1 80:16 83:14 86:23 87:6,8 90:6,7,11,16 90:24 93:13,18 97:1,4 98:3,15 100:16 102:7,9 102:11,22,24 103:18 105:18 108:11 109:2 112:4 131:3 138:21 139:18 147:20 150:13 150:16,19,22 150:23 151:23 152:6 155:14 155:15 160:16 161:12	<b>language</b> 19:23 20:20	<b>letters</b> 76:23
<b>investigations</b> 117:4	<b>July</b> 164:9	<b>know</b> 7:16 8:13 13:15 14:5,8 15:2 16:9 19:12 32:15 34:3,9 35:8,15 35:23 37:12 40:16,17 51:23 53:14,19 54:9 54:13 59:14,24 60:5 61:21 64:5 71:21 74:6,19,24 75:3,19 76:10 76:20 77:1 78:24 79:1 80:16 83:14 86:23 87:6,8 90:6,7,11,16 90:24 93:13,18 97:1,4 98:3,15 100:16 102:7,9 102:11,22,24 103:18 105:18 108:11 109:2 112:4 131:3 138:21 139:18 147:20 150:13 150:16,19,22 150:23 151:23 152:6 155:14 155:15 160:16 161:12	<b>large</b> 72:20,22 74:1 152:1 160:13,13	<b>letting</b> 35:2
<b>investment</b> 128:17 133:11 133:21	<b>June</b> 1:1,12 3:4 3:11 163:3,3	<b>know</b> 7:16 8:13 13:15 14:5,8 15:2 16:9 19:12 32:15 34:3,9 35:8,15 35:23 37:12 40:16,17 51:23 53:14,19 54:9 54:13 59:14,24 60:5 61:21 64:5 71:21 74:6,19,24 75:3,19 76:10 76:20 77:1 78:24 79:1 80:16 83:14 86:23 87:6,8 90:6,7,11,16 90:24 93:13,18 97:1,4 98:3,15 100:16 102:7,9 102:11,22,24 103:18 105:18 108:11 109:2 112:4 131:3 138:21 139:18 147:20 150:13 150:16,19,22 150:23 151:23 152:6 155:14 155:15 160:16 161:12	<b>largely</b> 141:8	<b>let's</b> 12:2 34:19 49:18 66:3 76:14 94:11 132:22
<b>invoices</b> 148:3	<b>just</b> 12:2 15:11 20:19 33:2 34:21 35:2 47:16 50:13,21 52:2,16 53:22 55:20 58:15 65:4,14 66:1 68:17,23 71:4 72:24 74:10 75:20 82:3 84:1 88:4 89:9 89:11 90:17,17 92:21 93:21 95:9 100:20 101:5,13 102:3 104:11 108:2 109:19 110:3 111:14 112:9 122:14 131:7 137:3 142:2 147:19 150:4 154:8 155:21 165:1	<b>know</b> 7:16 8:13 13:15 14:5,8 15:2 16:9 19:12 32:15 34:3,9 35:8,15 35:23 37:12 40:16,17 51:23 53:14,19 54:9 54:13 59:14,24 60:5 61:21 64:5 71:21 74:6,19,24 75:3,19 76:10 76:20 77:1 78:24 79:1 80:16 83:14 86:23 87:6,8 90:6,7,11,16 90:24 93:13,18 97:1,4 98:3,15 100:16 102:7,9 102:11,22,24 103:18 105:18 108:11 109:2 112:4 131:3 138:21 139:18 147:20 150:13 150:16,19,22 150:23 151:23 152:6 155:14 155:15 160:16 161:12	<b>larger</b> 13:11 136:10,12 152:20	<b>level</b> 10:13 15:1 99:2 107:3 143:2
<b>involved</b> 24:17 59:7 90:15 104:13 107:24 118:2 119:1 125:10 157:14	<b>just</b> 12:2 15:11 20:19 33:2 34:21 35:2 47:16 50:13,21 52:2,16 53:22 55:20 58:15 65:4,14 66:1 68:17,23 71:4 72:24 74:10 75:20 82:3 84:1 88:4 89:9 89:11 90:17,17 92:21 93:21 95:9 100:20 101:5,13 102:3 104:11 108:2 109:19 110:3 111:14 112:9 122:14 131:7 137:3 142:2 147:19 150:4 154:8 155:21 165:1	<b>know</b> 7:16 8:13 13:15 14:5,8 15:2 16:9 19:12 32:15 34:3,9 35:8,15 35:23 37:12 40:16,17 51:23 53:14,19 54:9 54:13 59:14,24 60:5 61:21 64:5 71:21 74:6,19,24 75:3,19 76:10 76:20 77:1 78:24 79:1 80:16 83:14 86:23 87:6,8 90:6,7,11,16 90:24 93:13,18 97:1,4 98:3,15 100:16 102:7,9 102:11,22,24 103:18 105:18 108:11 109:2 112:4 131:3 138:21 139:18 147:20 150:13 150:16,19,22 150:23 151:23 152:6 155:14 155:15 160:16 161:12	<b>last</b> 26:4 66:20 104:11 118:1 120:9 126:5 130:17	<b>leveling</b> 138:14 151:20
<b>involvement</b> 75:20 118:20 145:9 159:6	<b>just</b> 12:2 15:11 20:19 33:2 34:21 35:2 47:16 50:13,21 52:2,16 53:22 55:20 58:15 65:4,14 66:1 68:17,23 71:4 72:24 74:10 75:20 82:3 84:1 88:4 89:9 89:11 90:17,17 92:21 93:21 95:9 100:20 101:5,13 102:3 104:11 108:2 109:19 110:3 111:14 112:9 122:14 131:7 137:3 142:2 147:19 150:4 154:8 155:21 165:1	<b>know</b> 7:16 8:13 13:15 14:5,8 15:2 16:9 19:12 32:15 34:3,9 35:8,15 35:23 37:12 40:16,17 51:23 53:14,19 54:9 54:13 59:14,24 60:5 61:21 64:5 71:21 74:6,19,24 75:3,19 76:10 76:20 77:1 78:24 79:1 80:16 83:14 86:23 87:6,8 90:6,7,11,16 90:24 93:13,18 97:1,4 98:3,15 100:16 102:7,9 102:11,22,24 103:18 105:18 108:11 109:2 112:4 131:3 138:21 139:18 147:20 150:13 150:16,19,22 150:23 151:23 152:6 155:14 155:15 160:16 161:12	<b>last</b> 26:4 66:20 104:11 118:1 120:9 126:5 130:17	<b>levels</b> 137:24 139:10
<b>irrelevant</b> 49:4 86:22	<b>just</b> 12:2 15:11 20:19 33:2 34:21 35:2 47:16 50:13,21 52:2,16 53:22 55:20 58:15 65:4,14 66:1 68:17,23 71:4 72:24 74:10 75:20 82:3 84:1 88:4 89:9 89:11 90:17,17 92:21 93:21 95:9 100:20 101:5,13 102:3 104:11 108:2 109:19 110:3 111:14 112:9 122:14 131:7 137:3 142:2 147:19 150:4 154:8 155:21 165:1	<b>know</b> 7:16 8:13 13:15 14:5,8 15:2 16:9 19:12 32:15 34:3,9 35:8,15 35:23 37:12 40:16,17 51:23 53:14,19 54:9 54:13 59:14,24 60:5 61:21 64:5 71:21 74:6,19,24 75:3,19 76:10 76:20 77:1 78:24 79:1 80:16 83:14 86:23 87:6,8 90:6,7,11,16 90:24 93:13,18 97:1,4 98:3,15 100:16 102:7,9 102:11,22,24 103:18 105:18 108:11 109:2 112:4 131:3 138:21 139:18 147:20 150:13 150:16,19,22 150:23 151:23 152:6 155:14 155:15 160:16 161:12	<b>later</b> 114:2 126:8 131:6 144:9 146:18 149:23	<b>License</b> 166:12
<b>issuance</b> 41:5,8	<b>justify</b> 78:11 133:11	<b>know</b> 7:16 8:13 13:15 14:5,8 15:2 16:9 19:12 32:15 34:3,9 35:8,15 35:23 37:12 40:16,17 51:23 53:14,19 54:9 54:13 59:14,24 60:5 61:21 64:5 71:21 74:6,19,24 75:3,19 76:10 76:20 77:1 78:24 79:1 80:16 83:14 86:23 87:6,8 90:6,7,11,16 90:24 93:13,18 97:1,4 98:3,15 100:16 102:7,9 102:11,22,24 103:18 105:18 108:11 109:2 112:4 131:3 138:21 139:18 147:20 150:13 150:16,19,22 150:23 151:23 152:6 155:14 155:15 160:16 161:12	<b>latest</b> 68:21	<b>life</b> 32:8
<b>issue</b> 29:7,17 30:9,10,13 37:6 40:13 42:15 45:10 49:9 62:23 89:13 90:3,7 90:11 110:8 134:6,6,11,16 141:13 142:8 153:3	<b>keep</b> 36:1 69:22 86:10 142:17	<b>know</b> 7:16 8:13 13:15 14:5,8 15:2 16:9 19:12 32:15 34:3,9 35:8,15 35:23 37:12 40:16,17 51:23 53:14,19 54:9 54:13 59:14,24 60:5 61:21 64:5 71:21 74:6,19,24 75:3,19 76:10 76:20 77:1 78:24 79:1 80:16 83:14 86:23 87:6,8 90:6,7,11,16 90:24 93:13,18 97:1,4 98:3,15 100:16 102:7,9 102:11,22,24 103:18 105:18 108:11 109:2 112:4 131:3 138:21 139:18 147:20 150:13 150:16,19,22 150:23 151:23 152:6 155:14 155:15 160:16 161:12	<b>late</b> 26:6 71:3,9 91:6,23 111:7	<b>lightly</b> 11:23 84:14 85:16,17
<b>issued</b> 30:2 38:4 91:3 110:17,24 112:12 116:15	<b>keeping</b> 26:24 27:3	<b>know</b> 7:16 8:13 13:15 14:5,8 15:2 16:9 19:12 32:15 34:3,9 35:8,15 35:23 37:12 40:16,17 51:23 53:14,19 54:9 54:13 59:14,24 60:5 61:21 64:5 71:21 74:6,19,24 75:3,19 76:10 76:20 77:1 78:24 79:1 80:16 83:14 86:23 87:6,8 90:6,7,11,16 90:24 93:13,18 97:1,4 98:3,15 100:16 102:7,9 102:11,22,24 103:18 105:18 108:11 109:2 112:4 131:3 138:21 139:18 147:20 150:13 150:16,19,22 150:23 151:23 152:6 155:14 155:15 160:16 161:12	<b>later</b> 114:2 126:8 131:6 144:9 146:18 149:23	<b>like</b> 8:1,3 22:18 32:11,19 61:22 67:21 75:24 82:24 92:20 100:8 114:3 163:13,19
<b>issues</b> 29:4 35:23 37:4 74:9 109:23 128:6,18 163:6		<b>know</b> 7:16 8:13 13:15 14:5,8 15:2 16:9 19:12 32:15 34:3,9 35:8,15 35:23 37:12 40:16,17 51:23 53:14,19 54:9 54:13 59:14,24 60:5 61:21 64:5 71:21 74:6,19,24 75:3,19 76:10 76:20 77:1 78:24 79:1 80:16 83:14 86:23 87:6,8 90:6,7,11,16 90:24 93:13,18 97:1,4 98:3,15 100:16 102:7,9 102:11,22,24 103:18 105:18 108:11 109:2 112:4 131:3 138:21 139:18 147:20 150:13 150:16,19,22 150:23 151:23 152:6 155:14 155:15 160:16 161:12	<b>learned</b> 75:3 <b>least</b> 33:18 41:5 73:2,9,18 74:12 76:7 102:10 103:10 103:17 110:22	<b>likely</b> 24:22 138:23 139:23
		<b>knowledge</b> 6:17 67:12 130:14	<b>leave</b> 77:24 <b>LECG</b> 140:10	

<b>likes</b> 70:23 102:16	10:8 11:4 13:23,24 15:5 15:20,21 16:4 17:1 27:14 41:15 44:14 45:17 71:6 106:15 110:4 115:9 143:18 144:5,16 158:1	101:3 <b>maintenance</b> 62:2,7 <b>major</b> 30:3,20 38:1 45:6 60:20 73:11,13 73:20 83:18 90:1 94:5,8,10 109:15	73:5 76:14,16 76:17 103:18 146:24 <b>marginal</b> 151:13 <b>mark</b> 9:13 64:24 <b>marked</b> 17:2 115:9 121:3 122:23 <b>market</b> 152:18 <b>mass</b> 17:18 19:12 <b>master's</b> 116:2 140:1,2 <b>material</b> 92:19 112:6 <b>math</b> 144:4 <b>mathematics</b> 17:17 <b>matter</b> 1:11 3:8 8:6 21:12 49:10 97:5 <b>matters</b> 4:21 117:20 <b>Mattison</b> 21:23 21:24 <b>max</b> 52:11,20,22 53:3 <b>maximize</b> 21:17 <b>maximum</b> 53:15 53:22,24 54:8 85:22 86:2,9 <b>may</b> 32:6 46:5 60:9 66:19 69:5,7 108:1 118:4,4 141:7 142:21 152:8,8 154:21 156:17 162:18 <b>maybe</b> 126:18 146:12 163:21 <b>MBA</b> 116:2 <b>McClure</b> 114:14 114:17,22,24 122:6 137:2 138:9 145:3 156:17 <b>mean</b> 34:11 44:9 68:2 78:10 83:22 84:9	101:16 155:2 159:8 <b>meaning</b> 93:13 112:1 <b>means</b> 19:13 22:1,17,19 61:13 84:1 90:24 <b>meant</b> 44:9 65:9 113:7 <b>measure</b> 17:15 17:16 <b>measured</b> 17:8 <b>measuring</b> 18:6 <b>mechanism</b> 63:16 <b>meeting</b> 7:10 23:16 24:12 25:12 30:22 <b>meetings</b> 23:21 <b>MEGTEC</b> 32:12 <b>members</b> 163:2 <b>memory</b> 8:22 11:5 44:7 <b>mention</b> 148:10 <b>mentioned</b> 65:4 75:21 148:9 <b>merely</b> 92:16 <b>met</b> 11:24 <b>method</b> 17:21 81:2,4,8,13,15 82:10 92:23 112:2 113:4,11 <b>methodology</b> 17:19 51:4 53:1 55:20,23 56:24 58:7,16 58:19 98:10,13 106:9,17 108:13 131:11 158:11 161:19 <b>methods</b> 5:1,4 17:12,13 22:15 57:16 128:14 <b>Michigan</b> 34:18 34:20 35:13,21 126:9 130:19 146:7 147:13 <b>mid</b> 92:1
<b>limited</b> 30:2 37:21 75:20 <b>limiting</b> 37:12 37:24 45:6 <b>limits</b> 42:18,19 44:17 112:12 <b>line</b> 15:12 96:19 96:19 <b>list</b> 6:19 163:22 <b>listed</b> 37:20 154:15 <b>listened</b> 140:12 <b>listening</b> 14:17 <b>literature</b> 134:1 150:10 <b>litigation-relat...</b> 117:3 <b>little</b> 54:14 61:23 64:6 88:1 93:24 95:10 126:18 131:3 135:13 148:7 <b>live</b> 42:17,19,22 <b>load</b> 21:18,19,24 22:2 52:11,20 53:3 61:11 <b>loads</b> 52:16 <b>loan</b> 150:6 <b>locate</b> 34:20 <b>location</b> 17:16 17:18 60:8,11 <b>locations</b> 18:1 <b>long</b> 4:15 17:20 48:3,24 54:3 69:22 87:21 160:3 <b>longer</b> 22:24 32:16 135:2 <b>look</b> 8:21 9:9	<b>looked</b> 14:4,8 66:13 74:4 126:10 155:9 <b>looking</b> 16:9 34:5 41:22 67:4 84:19,24 92:18,21 96:11 99:13 119:3,3 123:9 124:13 127:4 <b>looks</b> 69:19 98:6 <b>loose</b> 8:16 165:8 <b>lot</b> 8:3 81:19 87:21 88:11,14 128:17 134:9 142:16 <b>low</b> 61:14 62:7 <b>lower</b> 52:5 61:23 <b>lowest</b> 110:10 123:24 136:8 140:20 158:15 158:17 <b>lunch</b> 114:1 <b>L.L.P</b> 2:8	<b>majority</b> 14:21 49:3 <b>make</b> 12:6,20 13:4 16:10 17:23 40:2,5 58:16 65:14,20 66:1 77:19 81:11 85:4 123:12 127:5 127:10 140:22 142:13 147:20 152:20 163:19 163:22 <b>makes</b> 53:4 140:20 <b>making</b> 27:4 101:2 138:15 153:8,16 <b>man</b> 10:17 <b>management</b> 74:22 140:13 140:20,22 141:14,20 142:12,15 152:13,14 153:7,9,12,17 <b>Manganiello</b> 166:4,11 <b>manner</b> 20:13 108:18 <b>manual</b> 118:15 128:6,6 136:13 136:19,20 137:6 154:5 155:5 <b>manufactures</b> 32:11 <b>many</b> 4:23 10:12 10:17 20:15 21:22 61:15		
	<b>M</b>			
	<b>M</b> 2:11 <b>machine</b> 148:16 <b>machinery</b> 148:20 <b>made</b> 32:20 35:17 36:4 40:8 50:14 57:14 67:16 77:15 125:7 140:14 142:6 161:3 <b>made-up</b> 99:22 <b>mailed</b> 157:23 <b>main</b> 123:7 <b>maintaining</b>			

<b>might</b> 34:3 61:20 84:20 119:16	60:16 131:8 139:24 146:7 155:11	<b>negotiations</b> 39:24 104:16	23:17 24:9 28:23 41:18 43:11 54:18 91:3,16	<b>obey</b> 153:13
<b>million</b> 53:16	<b>moving</b> 14:6 119:15 130:19 147:12	<b>neighborhood</b> 54:2,13 61:18	<b>notify</b> 82:17	<b>object</b> 47:15 49:7 68:1,7 81:18 82:24 98:16 99:2
<b>mind</b> 37:11 63:10	<b>MSDS</b> 27:6 92:16	<b>net</b> 127:15	<b>November</b> 7:4	<b>objected</b> 51:18
<b>mine</b> 118:24	<b>MSDSs</b> 92:10	<b>never</b> 63:14,15 78:3 101:13	<b>NSR</b> 29:22,23 30:9,10,15 31:5 40:22 93:24 94:17 109:23 110:8	<b>objection</b> 46:18 46:21 48:17,20 49:17 65:16 68:20 71:22 82:1 104:24 138:4,8 163:15
<b>minimally</b> 136:10	<b>Muccianti</b> 7:12	<b>new</b> 29:4,12 33:16 60:18,20 60:20 101:7 103:7 109:18 110:5 120:21 128:18 136:12 137:20 138:1 144:8 161:14	<b>number</b> 5:6 19:11,17 23:14 24:17 30:5 35:2 43:2 53:18,21 60:9 60:10 73:14 75:22 77:12,16 86:15 99:11,11 99:17,20 100:10 101:14 112:20 116:5 118:9,13 121:11,15 125:5 129:24 140:6,9,11 142:7 151:3 154:10,12,15	<b>obviously</b> 118:13 135:20
<b>minimis</b> 126:15	<b>much</b> 13:14 16:14,16 18:12 32:3 48:10,14 52:20 57:1,2 91:6 111:3 127:13,23 138:22 160:1 161:16 164:20	<b>next</b> 3:21 143:7 150:2 154:19	<b>numbers</b> 84:10 87:2,8 94:22 94:23 95:9 96:17,18,22,22 97:2,3,9,11,13 97:18 98:1,4,9 98:9 99:22,23 100:13,19,19 100:20,21 108:14,24,24 109:3,10,12,12 119:4 134:23 145:17,19 147:23 148:4 155:22 158:4 160:6	<b>objections</b> 23:11
<b>minimum</b> 82:13	<hr/> <b>N</b> <hr/>	<b>nine</b> 70:1 84:21 84:22	<b>nobody</b> 70:23,24	<b>obligation</b> 77:3
<b>minor</b> 151:11	<b>N</b> 2:1	<b>non</b> 21:12 46:11 79:23	<b>non-compliance</b> 94:5,6 118:5 120:8	<b>obligations</b> 77:1
<b>minute</b> 12:3 104:2	<b>name</b> 3:5 4:8 32:17 114:23 122:7	<b>non-attainment</b> 73:8 94:9 105:20	<b>non-compliance</b> 48:8 120:13,15 143:11	<b>observe</b> 139:14
<b>minutes</b> 82:13	<b>natural</b> 51:7 52:9	<b>non-compliant</b> 48:14 91:21 124:16 125:23 126:7 155:13 155:18	<b>non-compliance</b> 48:8 120:13,15 143:11	<b>obtain</b> 66:23
<b>missing</b> 62:15 84:2	<b>nature</b> 68:23	<b>North</b> 1:11 2:9	<b>Northwestern</b> 116:4,21	<b>obviously</b> 118:13 135:20
<b>Model</b> 134:18	<b>Navigant</b> 50:16 51:12 115:2,3 116:24 118:22 140:8,10	<b>Northwest</b> 116:4,21	<b>Notary</b> 166:22	<b>occasions</b> 21:22 57:7
<b>modification</b> 43:13,20,21	<b>Navigant's</b> 119:2	<b>Notary</b> 166:22	<b>note</b> 48:17 163:1 163:5	<b>October</b> 164:14
<b>moment</b> 156:18	<b>nebulous</b> 29:7	<b>note</b> 48:17 163:1 163:5	<b>noted</b> 46:22 68:20 71:22	<b>off</b> 14:14 57:18 57:20 69:21 74:10 113:20 113:23 121:4,6 121:21 122:2 126:7,16 150:18 154:2 156:18 162:24 163:21,24 164:22
<b>month</b> 26:7 46:8	<b>necessarily</b> 96:18	<b>noted</b> 46:22 68:20 71:22	<b>notes</b> 166:8	<b>offered</b> 65:12 71:14 163:11 163:19 165:2
<b>months</b> 111:8	<b>necessary</b> 62:17 63:11,24 153:2 154:24	<b>nothing</b> 34:21 156:11 162:16	<b>nothing</b> 34:21 156:11 162:16	<b>OFFICE</b> 2:2
<b>month-and-a-...</b> 64:20	<b>need</b> 8:7,8,9 65:19 66:1 75:16 89:24 95:16 97:19 129:24	<b>notice</b> 8:20 9:4,7 9:12 20:5	<b>notice</b> 8:20 9:4,7 9:12 20:5	<b>officer</b> 1:24 3:1 3:6 14:12 46:22 47:18,23 48:16,19 49:12 49:17 57:20,23 62:17 63:20,24 64:23 65:3,8 65:11,17,21 66:3,9 67:19 68:5,10,19 69:2,6,24 70:4 71:8,17,21 72:3,6 82:1
<b>moot</b> 40:10	<b>needed</b> 8:18 35:9			
<b>more</b> 21:19 32:19 34:3 71:1 80:16 90:9 92:17 100:8 103:2 107:9 128:13 128:15 135:13 139:10 154:22 155:21 160:18	<b>needs</b> 10:18 32:16,22 152:14			
<b>morning</b> 3:2	<b>negotiated</b> 5:22			
<b>most</b> 22:17 32:11 116:24 117:1 139:13 143:5				
<b>Mostardi</b> 4:11 62:12,14 63:21				
<b>motor</b> 61:19				
<b>move</b> 35:20 46:14 67:19 104:20 126:17 131:6 139:1 163:14				
<b>moved</b> 34:11				
			<hr/> <b>O</b> <hr/>	
			<b>oath</b> 99:7 100:3 100:7	
			<b>obedience</b> 153:19	

98:18 104:3,8 105:1,6 111:12 112:22 113:16 113:19,24 114:8 115:11 122:3 137:1 138:8 144:20 156:12,16,23 157:3 159:1 162:14,17,21 163:16,23 164:5,23 <b>official</b> 122:22 160:11 <b>often</b> 32:10 <b>Ohio</b> 150:15 <b>oil</b> 74:8 <b>Okay</b> 29:16 35:16 36:22 44:16 48:18 55:5 65:17 69:2 78:21 85:1,20 87:2 88:4 90:14 149:1,7 153:5 162:21 163:16 163:23 <b>old</b> 70:1 <b>once</b> 131:19 162:5 <b>one</b> 6:5 11:22 12:2 13:14 17:13,14 27:14 27:14,17,17 34:19 44:6 48:1 54:22 62:8 64:18 67:20 68:12,14 75:1,2 77:14 82:3 84:14 85:6 88:17 89:13,15 91:18 93:3,16 94:16 100:23 101:1 102:12,19 104:2,11 110:22 115:8,8 120:1,5 123:8 125:23 127:2	135:2 139:9 147:2 149:7,8 149:24 150:12 150:13,14 153:10 154:12 154:15 155:21 160:15 164:24 <b>ones</b> 15:9 101:22 150:16 <b>one-hour</b> 20:9 80:5,8,12 81:9 81:10,15 <b>ongoing</b> 126:3 <b>online</b> 66:13 <b>only</b> 15:13 22:3 33:10 45:14 54:5 61:10 67:20 73:4,11 73:12 86:1 93:11 101:22 155:15 <b>open</b> 134:8 146:16 164:23 <b>operate</b> 54:4,8 67:10 86:4 <b>operated</b> 80:6 81:8 <b>operates</b> 10:20 35:13 <b>operating</b> 26:15 29:17 41:13 44:8 46:17 48:9,12 50:23 51:3 52:2,12 53:10 54:22 63:1 66:19,21 69:11,15 73:7 85:10,20,22 86:2,10,12,13 86:20,23 94:18 94:23 100:7,22 103:16 126:3 129:4,8 130:2 130:7,8,9,13 135:20 136:1 143:7,21 146:10 149:17 158:8,10 <b>operation</b> 17:7	52:9 60:1 103:22 129:3 <b>operations</b> 21:1 26:1 35:11 86:17 <b>opinion</b> 14:20 22:2 24:21,24 27:21 38:19,21 45:4 95:12,13 112:15 120:16 137:23 138:12 143:16,17 <b>opinions</b> 134:7 <b>opportunities</b> 34:3 <b>opportunity</b> 20:10 63:16 161:21 <b>opposed</b> 53:1 159:17 <b>opposition</b> 160:10 <b>option</b> 15:14 79:5,8,18 127:2 <b>options</b> 31:11 40:1 58:3 77:23 92:5 <b>order</b> 118:8 136:15 <b>original</b> 8:24 49:4 <b>originally</b> 76:7 <b>OSHA</b> 74:9 <b>other</b> 6:23,23 10:10,11 15:8 19:6,14 20:20 20:23,24 21:4 28:6 30:6,10 47:14 51:7 56:5 62:17 68:17 73:20 75:10 78:13 88:18 107:23 117:19 118:16 121:15 123:9 125:14,16,17 128:10 133:18 134:3 135:17	135:18 141:2 145:16 147:24 150:16 152:19 155:13 163:4 <b>others</b> 32:12 57:5 112:16 <b>ourselves</b> 58:7 <b>out</b> 7:22,23 16:16 17:10 22:23 32:15 58:11,13 61:20 62:23 74:17 76:9,18,23 77:4 92:6 97:20 131:18 134:21 144:4 <b>outcome</b> 24:7 109:6 <b>outlay</b> 129:1,17 129:19 134:12 <b>outlined</b> 9:24 20:19 126:23 <b>outlines</b> 9:19 <b>outlining</b> 16:22 <b>output</b> 22:6 <b>outside</b> 141:6 142:19 <b>outweighed</b> 134:12 <b>oven</b> 16:2,5 17:9 18:3 101:5,8 101:13,15,16 101:21 102:3,6 102:23 103:1 <b>ovens</b> 102:19 <b>over</b> 4:17 8:5,12 53:19 58:23 99:19,21 110:2 127:14 142:3 145:15 <b>overall</b> 18:16 37:20 123:4 <b>overarching</b> 136:6 <b>overblown</b> 98:15 <b>overestimate</b> 51:5 <b>overestimation</b>	138:13 <b>override</b> 142:16 <b>overriding</b> 86:8 <b>overruled</b> 48:20 49:18 82:2 138:9 <b>overstating</b> 131:2 <b>own</b> 98:6 134:4 <b>owns</b> 35:13 <b>oxidation</b> 17:9 18:9 <b>oxidizer</b> 35:6 36:8 38:24 42:16 50:18,20 50:24 52:15 53:9,15 58:11 58:13 59:18 62:24,24 63:4 95:16,22 97:22 102:7 <b>oxidizers</b> 52:18 <b>ozone</b> 73:8 94:9 <b>O&amp;M</b> 52:24 <hr/> <b>P</b> <hr/> <b>P</b> 2:1,1 <b>package</b> 25:9,14 <b>Packaging</b> 1:6 3:9 6:23 7:2,3 9:7,19 11:9,18 12:5 13:21 15:17 24:2,11 24:15 25:1,8 25:18,20 26:9 26:14,23 27:21 28:9 29:7 30:24 31:10,18 33:10,15 35:11 35:17 36:13 38:20 39:4,19 45:5,22 46:7 50:14 53:9 61:8,12 62:9 62:11,14 64:1 70:11 72:10,18 72:19 73:21 83:10 88:13,16 95:20,23 99:14 101:3 109:15
--	--	--	--	--

110:14 114:12 117:24 118:2,4 118:13 119:6 119:17 120:2 124:10 125:7 125:12 128:24 130:1,18 137:11,24 138:23 139:20 142:4 151:20 152:5 156:24	<b>PAULA</b> 2:6 <b>pause</b> 57:22 82:4 93:22 <b>pay</b> 152:1 <b>paying</b> 61:22 <b>pays</b> 98:5 <b>PCB</b> 1:5 <b>peer</b> 128:12 <b>penalties</b> 152:8 <b>penalty</b> 99:12 123:5,15 128:19 138:2 138:13 139:6 156:5 <b>pending</b> 48:3 117:21 141:12 149:5,5,6 <b>penetration</b> 152:18 <b>people</b> 1:3 3:8 3:15 8:1,4 68:9 73:15,19 76:23 79:17 107:23 133:8,11 <b>per</b> 37:15,22 54:1 58:12,14 58:22 60:19 63:5 85:12 97:21,23 100:8 106:16,16 107:11 112:17 158:19 <b>percent</b> 15:4 18:15,16,17 53:2 54:9 87:14 151:14 151:16 <b>percentage</b> 14:24 15:3 <b>perform</b> 16:18 80:11 118:8 145:4 <b>performed</b> 17:4 18:23 19:24 20:15,23 21:10 53:6 80:1,2,3,7 80:22 110:14 117:24 132:8 <b>performing</b>	20:19 40:13 <b>Perhaps</b> 11:4 44:11 81:20 <b>period</b> 20:13 40:10,11 43:18 48:3,8,22 54:7 73:10 103:10 118:5 120:12 120:15 124:14 125:8 129:9 131:2 132:20 134:20 135:19 138:20,24 143:9 <b>periods</b> 127:6 <b>permanent</b> 35:1 36:5 <b>permanently</b> 129:8 <b>permit</b> 7:19,21 7:24 8:24 10:5 19:10,10,18,23 20:21 26:15 28:6,10,13 30:19 34:10 36:16,24 37:6 37:12 38:3 39:1 41:1,6,9 41:13 42:6,11 42:12,14 43:7 43:11,19,23 44:5,8,19 46:17 47:8 48:4,6,12,22 49:9 60:18,21 63:1,2,14,15 64:7 66:13,16 66:17,19,21 67:1 68:3,13 70:15,21 79:1 79:2 83:9,11 83:23 84:19 85:7 86:1,1,6,9 86:19 88:8,23 89:10,11,18,22 98:23 99:2,18 99:19 104:14 109:17 112:1 <b>permits</b> 28:17	29:17 30:2 48:2,9 59:15 60:1,6 67:4,23 68:8,16 110:15 110:19 111:18 112:12 <b>permitted</b> 5:5 <b>permitting</b> 19:7 29:4 35:24 47:14 110:6 <b>person</b> 147:3 <b>personal</b> 139:12 159:16 166:9 <b>Personified</b> 1:6 3:10 11:9 24:2 25:8 27:22 38:20 39:5,19 64:2 70:12,20 72:11,19 73:21 83:10 95:20,23 99:14 118:13 119:17 124:10 128:24 130:1 130:18 138:1 139:20 142:5 156:24 <b>Personified's</b> 35:11 114:13 <b>perspective</b> 118:24 119:2 <b>pertaining</b> 160:19 <b>petition</b> 70:18 73:4 94:24 97:12 108:3 112:15 <b>petitions</b> 157:15 158:16,18 <b>phone</b> 147:4,5 <b>Phyllis</b> 7:12,18 7:20 8:14 16:11 35:19 <b>picked</b> 63:7,8 <b>picture</b> 18:2 <b>piece</b> 86:4 100:4 103:7,11,12 125:20 129:10 <b>pieces</b> 93:7 <b>pile</b> 7:21	<b>pilot</b> 52:22 162:5 <b>Piper</b> 63:8 74:13 118:12 124:8 125:16 146:21 146:23 147:1 <b>place</b> 27:17 93:3 93:16 126:2 <b>places</b> 27:15 <b>Plaines</b> 60:11 <b>plan</b> 34:12 74:6 77:17 92:6 <b>planning</b> 86:14 159:12 <b>plans</b> 74:7 <b>plant</b> 35:14 93:9 126:9,13 127:11 146:10 146:16 <b>Plastics</b> 59:22 59:23 66:17,19 68:14 <b>Platt</b> 4:11 62:12 62:15 63:21 <b>play</b> 141:3,7 142:15 144:4 <b>playing</b> 137:24 138:14 139:10 151:21 <b>please</b> 4:7 9:9 41:15 44:14 45:17 47:19 66:4,15 113:21 114:22 115:9 116:9 121:8,22 <b>pleasure</b> 164:20 <b>plug</b> 27:10 <b>plus</b> 63:14 127:16,19 129:7 144:13 <b>point</b> 14:7 26:8 27:22 34:15 35:8,20 40:10 47:16 65:13 67:18 77:14 88:17 119:1 131:5 146:6 156:4 161:15 <b>pollution</b> 1:1,22
--	--	--	---	--

3:6 4:21 24:18	10:10 41:18	126:16 129:24	162:4	38:22 56:1
30:7 74:5	55:9,10 56:4	130:19 131:4,6	<b>print-offs</b> 67:16	66:17
100:13 105:11	71:13 83:4	131:20,20	<b>prior</b> 8:19 20:5	<b>project</b> 8:12,19
112:15 117:11	84:10 87:1	138:1 143:11	76:8,11 78:8	<b>projects</b> 117:5
150:20 154:22	94:22 95:5,15	143:13,14,24	82:16 118:20	<b>promised</b> 11:11
<b>polyethylene</b>	<b>prescribed</b>	144:8,14	140:10 145:9	<b>promulgated</b>
76:4	20:12 113:11	147:12 155:8	<b>privy</b> 49:2	72:16 92:11
<b>portion</b> 17:11	130:9 161:18	155:10,13,18	<b>probably</b> 3:18	128:5
47:21 82:11	<b>present</b> 18:18	155:18,20	17:23 53:2	<b>promulgates</b>
<b>position</b> 89:20	36:11 39:2	<b>presses</b> 11:18,22	61:18,22 119:4	107:2
101:3,3,12	124:14	12:16,22 13:2	126:15 131:2	<b>proper</b> 82:14
159:16,17,21	<b>presented</b> 30:7	13:5,7,9,10,12	135:6	138:7
159:24 160:11	30:11 59:8	13:13,14 15:12	<b>problem</b> 43:1	<b>properly</b> 32:21
160:15,19	97:8 98:7	48:10 60:8,10	122:10	49:15 149:11
<b>positions</b> 160:12	106:10	61:15 84:14	<b>problems</b> 33:1	<b>properly-sized</b>
<b>possibility</b> 15:5	<b>presenting</b>	85:6 101:1	<b>procedure</b> 82:6	130:14 149:15
34:23 35:4	92:15	120:4	161:11,12	<b>proposal</b> 8:14
110:9	<b>presently</b> 115:1	<b>pretty</b> 48:10,14	<b>proceed</b> 9:23	<b>proposed</b> 127:21
<b>possible</b> 14:9	<b>press</b> 12:1,17	91:6	29:3 127:1	<b>Protection</b> 23:10
142:18 161:16	13:17,18,24	<b>prevention</b> 74:5	<b>proceeded</b> 124:3	23:24 28:11,22
<b>possibly</b> 34:17	14:5,6,7 15:20	<b>previous</b> 90:16	<b>proceeding</b> 5:12	29:3 38:10
151:11 152:18	15:21,23,24	117:8	5:13 49:22	40:12 123:21
<b>post-hearing</b>	16:2,14,17	<b>previously</b>	57:10 120:24	<b>protocol</b> 20:7
162:23 164:10	17:6 21:10	129:14 130:3	130:7 132:9	80:13,14,22
164:12	22:17,20 23:3	157:13	137:9 142:24	<b>protocols</b> 22:13
<b>potential</b> 7:16	23:12 25:21,24	<b>Primarily</b>	<b>proceedings</b>	<b>prove</b> 19:17
31:21 109:16	26:2,3,5,10	146:22	1:10 24:18	78:7 96:12
109:20,23	27:7 31:8,11	<b>prime</b> 132:24	55:17 66:7	<b>provide</b> 7:1
118:3,18	31:13 33:14,15	150:6	104:6 114:6	16:22 31:12
123:13 129:12	33:17,22 34:4	<b>principle</b> 136:7	117:8,10	50:7,16 60:21
131:14 136:3	34:6 35:6,9	<b>printed</b> 75:24	156:21 164:3	62:15 103:24
<b>potentially</b>	36:9,10 39:20	76:3	165:20 166:5,8	115:4 120:12
37:13 106:18	39:21 40:13	<b>printer</b> 73:7	<b>process</b> 35:24	121:15
110:19	50:21 52:2	91:8	<b>processes</b>	<b>provided</b> 17:3
<b>PPI</b> 90:17	73:9 77:11,16	<b>printers</b> 5:6,7	148:20	43:9 59:20
<b>predicted</b> 130:8	78:4,11,16,18	6:23 15:8	<b>produce</b> 141:1	60:23 94:19
<b>premiums</b>	86:4 91:5,7,20	27:23 29:6	<b>produced</b> 8:15	98:23 100:13
133:17	92:2 98:24	30:6,11 72:19	128:16	103:22 113:10
<b>preparation</b>	100:10,23	75:24 76:7	<b>product</b> 15:12	116:12 119:6
8:24 9:3 10:3	101:4,7,8,14	79:20 157:23	<b>production</b> 26:2	119:13,14
59:16	101:18 102:2,2	<b>printing</b> 4:21	139:2 152:11	129:18 130:3,4
<b>prepare</b> 9:24	102:8,13	5:2,19,24	<b>products</b> 32:12	130:20 134:1,2
10:5,14,17,22	109:18,21,23	12:20 20:24	136:12 140:24	137:14 150:14
11:10 12:12	110:4,5,14	26:1,5,12 43:4	<b>professional</b>	160:16
30:23 36:16	111:2,4 118:6	52:15 61:4	6:20 116:6	<b>provides</b> 51:12
40:21 49:21	119:15 120:1,5	62:4 75:7,8,10	140:8 164:18	128:7,11
50:3 55:19	120:7,11,17,21	75:22 92:11	<b>professionals</b>	<b>proxy</b> 133:9
86:24 120:23	120:21 124:15	120:9 148:19	151:5	144:5
<b>prepared</b> 9:12	125:23 126:7,9	148:20 157:19	<b>program</b> 38:20	<b>public</b> 116:11



134:16,17 163:2 164:14 166:22 <b>publications</b> 6:20 <b>publish</b> 105:22 <b>purchase</b> 31:21 32:13 33:6 64:9 <b>purchased</b> 120:20 <b>purchasing</b> 34:17 <b>purely</b> 140:22 152:23 153:6 153:17 <b>purpose</b> 17:13 19:16 58:19 68:14 71:7 96:4 <b>purposes</b> 18:5 19:7 57:1 80:10 86:14 99:12 158:7 <b>pursuant</b> 38:24 <b>pursue</b> 125:3 126:7 <b>pursued</b> 125:2 125:20 126:6 139:22 <b>push</b> 100:17 <b>pushed</b> 130:23 <b>put</b> 32:17 36:4 70:21 87:2 90:12 101:13 102:19 126:2 157:4 161:10 <b>putting</b> 34:24 35:5 102:3	138:7 142:1 155:21 <b>questioned</b> 125:15 <b>questions</b> 5:11 8:15 57:11 80:17 92:8 104:19 109:22 111:11 144:19 156:15 162:13 <b>quickly</b> 8:14 24:9,10 <b>quite</b> 130:6	<b>reached</b> 90:4 125:8 <b>read</b> 47:19,22 58:4 <b>readily</b> 69:18 <b>real</b> 52:23 57:2 96:18,19,22 97:1 <b>reality</b> 134:10 161:15,16 <b>really</b> 8:15 32:9 35:15 52:24 54:17 75:7 89:8 100:17 126:14,15 127:3 134:11 146:18 153:5 <b>real-world</b> 53:1 158:13 <b>reason</b> 23:7 86:8 93:11 142:5 <b>reasonable</b> 51:24 53:11,20 95:11 119:21 126:21 141:14 142:12 147:14 151:7 <b>reasonably</b> 105:14,16 160:23 <b>reasons</b> 19:5 102:12 152:19 <b>REATH</b> 2:8 <b>rebuttal</b> 157:5 <b>recall</b> 11:2 26:4 41:20 43:24 76:9 87:15 95:12 108:1,2 108:11 111:4 146:15,15 147:2 148:13 151:17 160:4 <b>receipt</b> 8:20 <b>receive</b> 23:9 <b>received</b> 25:8 <b>recently</b> 47:10 117:1 161:13 <b>recirculate</b> 17:11	<b>recirculating</b> 16:2,5 17:9 101:16,21 102:6,23 103:1 109:21 162:1 <b>recollection</b> 57:17 108:15 <b>recommend</b> 33:5 <b>recommended</b> 128:2 <b>reconditioned...</b> 129:21 <b>record</b> 3:2,3 4:8 12:14 26:24 27:3 47:21 57:18,21,24 66:10 69:7 71:22 93:16,18 95:3 104:9 113:20,23 114:1,9,23 116:10 121:4,6 121:21 122:2,4 137:2 154:2 156:18,24 162:24 163:1 163:22,24 164:6,22,24 <b>records</b> 12:5,11 27:5 92:9,14 92:22 93:1,3 93:10,12 <b>RECROSS</b> 111:15 <b>recuperative</b> 58:10 97:20 <b>redirect</b> 105:7,8 156:13 <b>redo</b> 92:9 <b>reduction</b> 110:11 <b>reference</b> 139:6 <b>referring</b> 5:14 64:16 81:21 83:2 122:21 137:2 <b>refers</b> 79:15 <b>reflect</b> 37:14	56:23 135:3 161:15,16 <b>reflected</b> 134:19 <b>reflection</b> 85:18 <b>refresh</b> 8:22 11:5 <b>refreshes</b> 44:6 <b>refurbish</b> 32:16 <b>refurbished</b> 31:21 32:1,23 33:11 129:23 130:15 135:13 148:10,11,14 149:11,15 <b>regard</b> 26:24 53:8 88:15 141:22 <b>regarding</b> 6:2 15:22 21:9 23:11,16,24 25:8 28:23 29:4 31:12 36:12 38:23 43:10 51:16 54:22 57:5,11 62:2 69:14 76:8 121:16 131:18 140:13 157:19 160:5 <b>regen</b> 53:2 <b>regenerative</b> 52:14,17,24 58:12 95:16,22 97:22 <b>Region</b> 67:1,13 <b>Register</b> 118:15 128:11 134:19 153:22 <b>registered</b> 63:23 <b>regulate</b> 105:19 <b>regulating</b> 77:3 <b>regulation</b> 73:11 73:13 79:10,14 79:16 106:15 <b>regulations</b> 22:8 27:23 73:17,20 73:22,24 74:4 74:14,18,21 75:4 76:23
<b>Q</b>	<b>R</b>			
<b>qualifies</b> 37:16 37:18 <b>quality</b> 159:12 <b>quantity</b> 74:1 <b>question</b> 44:12 47:19 50:2 81:19 82:24 89:15 96:16 104:11 113:5	<b>R 2:1</b> 74:2 <b>RACT</b> 55:24 57:1 59:2 96:9 96:17,19 97:15 97:16 98:7,11 98:13 99:10,11 99:15 100:19 100:21,24 105:13,23 106:1,15 108:18 109:12 109:12,15,20 110:3,5 112:19 113:11,13 158:11,16,19 <b>radar</b> 61:24 <b>raise</b> 40:12 <b>raised</b> 5:11 37:4 <b>ran</b> 17:20,23 <b>RANDOLPH</b> 1:22 <b>range</b> 144:3 <b>rate</b> 17:15,24 53:15,23 54:4 54:6 112:3 132:21,23,24 132:24 133:3,6 133:8,10,13,19 133:24 135:19 150:5,6,9 151:13 161:14 <b>rates</b> 16:9 17:18 19:6 42:13 143:3 <b>reach</b> 142:7			

78:23 79:1,4 80:3 82:21 94:7 96:7 106:1 109:15 109:20 110:3,6 111:21 120:1 141:9 152:4 153:13 <b>regulatory</b> 19:20 20:17 59:5 73:16 74:23 141:13 153:10 <b>relate</b> 132:18 <b>related</b> 116:22 118:6 <b>relates</b> 4:20 138:15 <b>relation</b> 100:5 <b>relationship</b> 159:6,8 <b>relevance</b> 47:16 68:2,8 86:14 86:16 100:1 <b>relevancy</b> 68:23 <b>relevant</b> 4:20 47:24 68:13,18 69:3 70:19 71:7 87:4 115:23 118:14 125:11 138:19 <b>reliable</b> 32:10 67:8 <b>reliably</b> 19:5 <b>relied</b> 31:7 41:4 54:21 55:11 69:9 71:11 119:10 120:16 121:12,18 145:11 154:4 155:4,5 <b>relief</b> 5:20,24 6:8 24:2 106:14,18 <b>relocating</b> 126:9 <b>rely</b> 40:3 67:3 119:5,9 128:10 145:14 153:23 <b>remarkably</b>	48:23 <b>remember</b> 8:6 26:6 35:22 57:4 159:24 160:1,7,7,8 <b>rephrase</b> 98:19 <b>replaced</b> 32:22 56:1 <b>replacing</b> 32:22 <b>reply</b> 164:13 <b>report</b> 1:10 20:12 41:11 49:21 50:1,4,8 50:12 73:24 118:19 119:12 120:23 121:2 121:11,13,13 122:5,14,17,17 122:22 126:23 142:23 147:24 148:1,5,10 151:12 <b>reported</b> 73:24 166:5 <b>reporting</b> 9:2 <b>reports</b> 11:11,16 12:12 26:18,21 27:20 38:9,15 38:19 62:16 63:9,19 <b>representative</b> 64:1 <b>represented</b> 107:17,20 <b>repurchase</b> 32:13 <b>request</b> 7:8 42:10 43:13 44:18 45:15,19 46:6 47:2 49:1 84:5 85:7 97:19 <b>requested</b> 42:20 43:19 47:20 62:11,14 90:17 134:15 <b>requesting</b> 41:12 90:21,23 <b>requests</b> 103:19	<b>require</b> 20:18 110:20 116:6 <b>required</b> 8:17 22:5 23:4 31:5 36:7 62:2 76:22 78:23,24 79:1 80:24 81:16,22,23 82:20 83:10 84:2 92:10,14 136:10,16 <b>requirement</b> 19:21 20:18 21:16 74:2 83:14 105:17 110:20 <b>requirements</b> 11:24 18:20 20:4 22:8,12 26:11 61:14 80:4 89:22 94:1,4 110:7 116:7 <b>requires</b> 19:23 20:5,6,8,9,12 80:8,11 <b>requiring</b> 29:22 30:14 <b>resell</b> 32:17 <b>reselling</b> 32:23 <b>reserve</b> 162:22 <b>resolution</b> 142:8 <b>resolve</b> 141:12 <b>respect</b> 13:17 25:21 27:2 30:9 42:6 45:13 54:3 61:8 <b>respond</b> 45:23 69:5 <b>responded</b> 25:16 37:4 47:9 106:7 109:11 109:21 <b>Respondent</b> 1:8 2:12 <b>Respondent's</b> 3:17 46:23 71:24 115:12	122:8,14 137:3 158:2 163:10 163:11 164:11 165:10,13,13 165:15,16 <b>response</b> 9:4,7 9:11 41:17 46:5,9 64:21 71:13,14 <b>responses</b> 49:13 <b>restate</b> 141:24 <b>rested</b> 3:16 157:1 <b>result</b> 62:20 <b>results</b> 16:23 19:9 21:10 22:1 23:19 40:20 <b>resumé</b> 6:15 115:17,20 <b>retained</b> 118:22 <b>retroactive</b> 90:22 91:1 <b>retrospect</b> 63:11 <b>revealed</b> 71:9 <b>review</b> 29:4,12 29:22,24 60:3 60:6 83:16 128:17 161:22 <b>reviewed</b> 30:5 44:24 53:5 60:1 63:19 108:4,6 118:14 124:6,7 132:7 142:22 145:14 <b>revised</b> 50:8 88:16,17,19 <b>revises</b> 43:6 <b>revision</b> 41:11 41:17 42:10 43:23 44:4,6 44:16,18 88:21 <b>rewinder</b> 26:3 <b>re-ducted</b> 111:6 <b>RE-REDIRE...</b> 113:1 <b>Rich</b> 118:11 <b>Richard</b> 3:22 4:2,9	<b>ridiculously</b> 53:13 <b>right</b> 63:12 78:10 79:23 88:17 89:19 90:22 91:1,13 92:3 96:1 100:9 114:2,12 135:14 145:6 146:8,21 148:21,23 149:12,21,24 150:10 154:10 155:16 156:10 157:3 <b>risk</b> 133:17 <b>risky</b> 133:12 <b>risk-free</b> 132:24 133:2,6,15,24 150:5,8 <b>room</b> 35:6 <b>rough</b> 143:15 <b>roughly</b> 54:1 <b>ROY</b> 2:11 <b>RPR</b> 166:4,11 <b>RTO</b> 59:9,12 60:3 61:5 62:3 62:3 69:17,20 77:17 79:24 101:9 102:4 103:4,23 111:5 111:7 119:14 120:20 125:21 125:23 129:23 130:15 135:13 142:6 144:8 147:11 148:10 149:11,11,15 149:20,20,22 152:20 162:2 <b>RTOs</b> 62:6 <b>rule</b> 5:19,24 68:22 81:21,22 81:24 83:2 154:20 <b>rulemaking</b> 59:6 107:2 113:12 <b>rulemakings</b> 98:6,8 105:10
--	---	--	---	--

<b>rules</b> 7:20,24 26:12 58:20 72:12,15 75:8 75:9,9 76:19 81:19 92:11,15 140:18 157:20	<b>scenario</b> 126:14 126:19 127:22 127:24 128:23 130:16,17 136:22 139:13 144:12 146:19 155:10	40:2,5,8 53:4 77:15,19 93:17 <b>sent</b> 41:18 51:11 51:12 <b>sentence</b> 154:20	<b>shown</b> 21:14 41:5 57:8 <b>shows</b> 60:7 85:12	109:24 110:4,5 111:7 116:23 120:21 <b>size</b> 61:17 125:24 129:23
<b>ruling</b> 68:21	<b>scenarios</b> 34:13 34:19 118:18 119:3,11 126:20 139:9 145:21 146:4 147:11 155:22	<b>separate</b> 35:12 49:10 82:12 108:22 121:3 122:4 153:3	<b>shut</b> 15:14 25:24 33:22 91:7,8 92:2 111:3 120:7,11 126:16 155:10	<b>sized</b> 149:11
<b>run</b> 13:2 35:2 52:20,21 61:19 165:1	<b>schedule</b> 164:7	<b>September</b> 23:15 24:13 30:22 164:12	<b>shutdown</b> 39:21 120:8 131:21	<b>skepticism</b> 160:15
<b>running</b> 13:3 17:7 52:11 53:24 61:15,16	<b>schedules</b> 135:3	<b>SER</b> 27:20	<b>shutting</b> 14:7 33:14	<b>slow</b> 13:2
<b>runs</b> 82:12	<b>School</b> 116:4,21	<b>series</b> 22:14 118:10	<b>side</b> 52:5	<b>small</b> 32:13 135:4,10
<b>R-A-C-T</b> 158:11	<b>scope</b> 8:16	<b>set</b> 118:17 122:23 132:15	<b>sides</b> 134:6,10	<b>Society</b> 116:16
<b>S</b>	<b>season</b> 63:6	<b>sets</b> 113:9	<b>significant</b> 61:6 61:11 73:8 132:11,17 135:17 143:3,5 143:8	<b>sold</b> 32:1
<b>S</b> 2:1	<b>seasonal</b> 26:20 38:9,15,18 62:16 63:19	<b>settle</b> 36:13	<b>similar</b> 20:24 21:3 24:2 30:16 54:23 56:4 67:10 132:15 138:20 143:21,21	<b>solely</b> 78:11
<b>safe</b> 165:19	<b>second</b> 55:6 57:19 66:18 82:3 93:21	<b>settled</b> 60:16	<b>similarity</b> 132:16 135:9	<b>solution</b> 43:2
<b>safety</b> 74:9 92:19	<b>section</b> 17:9 18:9 79:16 123:20 136:21 159:13,14	<b>settlement</b> 39:24 118:24 145:9	<b>simple</b> 19:8 142:17 156:6	<b>solvent</b> 13:4 18:7 21:18,19 42:13,18,19,22 44:17 52:15
<b>same</b> 6:1 25:4 33:13,13 38:3 42:2 44:22 70:13 95:19 98:8,9,12 106:8,17,20 107:7 108:18 122:17 129:13 129:15 131:10 143:22 144:3,9 145:21 147:20 152:4	<b>see</b> 6:6 16:4,13 16:13 17:21 34:5 54:15 67:21 69:19 71:4 82:8 83:5 83:17 93:4 94:11 95:16 97:19 127:13 134:9 135:4 138:22 147:23	<b>settlements</b> 30:6 30:11	<b>simplicity</b> 131:6	<b>solvent-based</b> 12:15,21 13:5 13:11 14:22 15:4 16:1
<b>sampling</b> 82:15	<b>section</b> 17:9 18:9 79:16 123:20 136:21 159:13,14	<b>seven</b> 48:23 73:10	<b>simply</b> 126:7	<b>some</b> 5:20 49:1 50:8 59:16 62:15 63:10 75:14,23 76:7 86:8 87:11,16 110:24 117:5 119:3 124:11 127:5,10 128:11 132:20 134:2 141:7 143:12 145:9 145:12,24 150:9 152:18 159:5 164:24
<b>sat</b> 137:8 140:12 141:17 144:7 160:21 161:24	<b>see</b> 6:6 16:4,13 16:13 17:21 34:5 54:15 67:21 69:19 71:4 82:8 83:5 83:17 93:4 94:11 95:16 97:19 127:13 134:9 135:4 138:22 147:23	<b>several</b> 7:16 10:16,21,22 20:16 33:8 57:7 150:24 163:18	<b>since</b> 27:19 56:1 64:19 103:17 116:20 143:10 146:2	<b>somebody</b> 77:2
<b>satisfied</b> 18:1	<b>seeking</b> 99:1,18 103:16	<b>sheet</b> 45:1 92:19	<b>single</b> 35:1 100:23	<b>someone</b> 32:14
<b>savings</b> 131:19 132:3	<b>seeks</b> 128:13	<b>sheets</b> 92:16	<b>sir</b> 11:12 12:10 14:2 18:21	<b>something</b> 40:7 65:5 92:20 126:12 142:14
<b>saw</b> 145:16 146:11,17	<b>seemed</b> 70:24	<b>shifted</b> 26:2	<b>situation</b> 19:18 63:15 64:6 136:9	<b>sometime</b> 105:4
<b>saying</b> 79:3,8 86:18,22 87:4 87:5 99:10	<b>seen</b> 25:14 30:13 134:3	<b>Ship</b> 32:12	<b>six</b> 13:14 34:24 35:2,5,20 36:5 101:8,14 102:2 102:8,19,20	<b>sometimes</b> 52:19 139:15
<b>says</b> 19:11 52:19 81:22 82:11 85:20 154:20 155:2,3	<b>self-firing</b> 162:5	<b>Shore</b> 32:12		<b>somewhat</b> 68:21 69:3 86:15 146:17
<b>scaling</b> 134:23	<b>seminars</b> 5:3,4	<b>short</b> 40:10 54:7 65:19 66:5 104:4 114:4 156:19 164:1		<b>somewhere</b>
	<b>send</b> 76:23	<b>shorter</b> 82:14		
	<b>sending</b> 76:9	<b>shorthand</b> 166:5		
	<b>sense</b> 12:21 13:4	<b>shortly</b> 7:10		
		<b>shove</b> 100:17		
		<b>show</b> 79:22 83:1 83:5 95:17 96:24		
		<b>showing</b> 46:15		

54:13 61:18,23 102:15 135:10 135:15 <b>soon</b> 90:12 <b>sorry</b> 12:4 14:7 14:12 50:2 63:21 65:7 91:10 122:9 141:24 160:2 <b>sort</b> 71:2 74:10 98:9 134:23 <b>sorts</b> 94:1,3 <b>source</b> 29:4,12 30:3,20 37:15 37:16,18 38:1 45:6 48:13 55:1 60:20 83:18 90:1 94:8,10 106:14 109:16 110:5 <b>sources</b> 10:11 21:4,5 28:12 28:24 29:11 38:4 43:3 47:14 69:15,20 73:16 105:19 107:3 137:20 <b>Sparta</b> 35:13 147:13 <b>SPCC</b> 74:7 <b>speak</b> 14:13 68:6 125:8 <b>speaks</b> 9:18 <b>specializations</b> 116:2 140:3 <b>specific</b> 20:13 97:8,9,18 98:1 112:1 118:6 139:18 160:8 160:17 162:10 <b>specifically</b> 5:6 7:21 13:16 15:9 62:6,8 63:10 79:12,17 79:18 119:12 123:10 136:14 138:14,19 145:4 148:13 <b>specifies</b> 79:17	79:18 <b>speed</b> 13:3,5,15 61:13 162:6 <b>spend</b> 102:21 103:12 <b>spent</b> 4:23 99:15 99:15 101:13 102:20 138:24 <b>spreadsheet</b> 7:22 27:17 51:13 57:15 113:4 161:7,10 <b>spreadsheets</b> 51:5 52:10 55:21,23 109:9 <b>Springfield</b> 24:13 <b>square</b> 64:9 <b>SS</b> 166:1 <b>stack</b> 4:24 5:1,4 16:12 18:20 19:12,24 20:20 21:7,9,13,17 21:21 22:16 23:3 34:21 38:23 39:2,6 39:11,14,17,20 40:13 41:11 77:16,19 78:16 80:5 110:20 111:18 112:6,8 112:11,13 <b>staff</b> 154:23 <b>stand</b> 78:1 114:14 116:10 <b>standard</b> 5:15 6:8 15:10 17:19 24:2,11 24:23 25:2,19 28:19 29:6 43:1 51:4,8 53:17 55:17 56:3,17 57:7 70:18 73:3 75:18 76:15,17 90:18,22,24 94:23,24 96:5 96:14,21 99:7 100:15 104:22	105:13 106:11 108:3 112:14 112:17 119:16 125:4,13 127:3 127:9,19 135:5 137:14 139:1 139:13,21 147:13 157:15 158:7,16,18,21 159:18,23 160:12 <b>standards</b> 24:18 38:5 56:8 107:14 152:10 <b>start</b> 9:2 27:16 142:3 <b>started</b> 27:4 33:18 124:19 145:15 <b>starting</b> 9:1 11:17 <b>start-up</b> 54:6 131:21 <b>state</b> 1:3 2:3 3:8 4:7 17:7,22,24 20:10,11 36:1 36:1 39:24 41:13 58:7 59:6 66:18,20 103:15 114:22 142:8 157:4 166:1 <b>stated</b> 66:12 72:10 77:14 83:19 150:4 <b>statement</b> 8:7 154:20 <b>states</b> 105:24 106:22 <b>State's</b> 117:13 <b>status</b> 11:19 13:17 77:5 119:24 151:5 <b>statute</b> 153:13 <b>stay</b> 128:18 <b>stayed</b> 144:3 <b>steady</b> 17:7,22 17:24 <b>Steger</b> 9:13	<b>stenographic</b> 166:8 <b>step</b> 156:17 162:18 <b>steps</b> 9:19 20:18 25:20 62:17 118:9 136:14 139:3 <b>stick</b> 12:2 <b>still</b> 42:17,22 63:13 84:4 90:3,7 113:10 114:12 117:21 134:8,15 149:4 149:5,6 <b>stop</b> 26:1 <b>storage</b> 74:8 <b>storm</b> 74:3,5 <b>strategy</b> 116:3 140:4 <b>Stream</b> 34:20 35:11,20 36:5 72:24 118:6 <b>Street</b> 1:11,22 2:3 <b>strict</b> 96:6 <b>strike</b> 5:9 19:21 23:8 37:13 51:16 109:18 142:12 <b>structurally</b> 132:14 <b>structure</b> 22:20 35:15 <b>studies</b> 19:9 <b>study</b> 16:13,23 16:23 <b>style</b> 14:16 <b>Styzens</b> 51:18 53:6 54:21 55:11 59:20 60:24 69:9 95:8 121:13,14 132:8,23 133:9 134:22 138:3 140:13 144:9 150:5 151:16 <b>Styzens's</b> 135:2 142:23 151:12	<b>subject</b> 25:7 60:12 73:23 74:1,3,5,7 137:15 151:24 152:3 <b>subjects</b> 94:6 <b>submission</b> 20:6 <b>submit</b> 9:7 28:16 41:11 42:10 <b>submits</b> 38:15 <b>submittal</b> 11:15 20:12 30:23 38:7 41:10 <b>submitted</b> 19:9 26:15,17 27:20 28:9,14 37:5 38:9 40:22 41:20 42:7 47:6 49:13 55:16 57:10 64:2 65:5,9 83:11 88:18,19 88:20 <b>submitting</b> 62:15 63:9 <b>subpoint</b> 136:22 <b>SUBSCRIBED</b> 166:19 <b>subsequent</b> 49:5 111:18 146:11 146:17 152:8 <b>subsequently</b> 29:16 37:6 40:7 50:7 83:20 137:19 152:11 <b>subset</b> 76:3 <b>substantially</b> 21:11 <b>substantive</b> 26:11 42:15 119:24 <b>substrates</b> 76:1 <b>sufficient</b> 42:15 <b>suggesting</b> 138:3 <b>suggestion</b> 122:11 <b>Suite</b> 1:23 2:4,9
---	---	---	---	---

<b>summarize</b> 116:21	166:9	<b>tens</b> 10:22	76:6 96:20,24	164:17
<b>summarizes</b> 50:13	<b>takes</b> 10:14,16 23:1 134:17	<b>term</b> 111:24 112:9 148:24	97:10 104:21 106:8 108:16	<b>themselves</b> 163:4
<b>summation</b> 129:11	<b>taking</b> 14:16	<b>terms</b> 11:19 18:12 40:24 77:21 106:4	115:5 125:5 130:6 131:17 131:23 137:8	<b>theory</b> 127:17 129:6
<b>suppliers</b> 31:22	<b>talk</b> 78:21 87:22 132:22 133:8	<b>test</b> 5:1,4 16:12 18:7,19,20,23 19:3,3,8,13,24 20:6,11,13,20 21:9,14,15,17 21:21 22:2,3 22:24 23:2,3 34:21 38:23 39:2,6,11,14 39:17,20 40:6 40:9,13 41:11 77:16,20,23 78:2,3,6,16,22 79:13 80:4,8 80:11,12,14,18 80:18,22 82:21 102:13 110:20 112:6,9,11	137:11 140:13 141:18 147:10 148:8 152:21	<b>therm</b> 53:20
<b>support</b> 24:1,11 24:23 25:3,19 34:6 90:19 121:15 159:22 160:11	<b>talked</b> 44:17 93:24 102:11 111:17 125:14 149:10 152:13 154:10	<b>tester</b> 4:24 21:7	<b>testing</b> 22:6,16 77:9,10 111:18	<b>thermal</b> 38:24 50:17,20 52:14 52:17 53:8,15 58:10,12 59:18 95:16,22 97:20 97:22 102:7
<b>supported</b> 24:3 158:20	<b>talking</b> 47:17 52:14 55:2 75:10,17 79:11 94:16 104:12 104:13 141:5 147:22	<b>testified</b> 4:4 6:2 50:13 54:17 58:15 69:14 70:10 74:8 75:6 90:15 92:4 93:4 99:6 114:19 117:7 129:14,20 135:21 142:5 145:3 152:16 154:8 157:10 157:14 160:22 163:7	<b>tests</b> 19:4 20:9 20:15 21:13 79:18,21,23 80:6,9,12 81:9 81:10,15 112:13	<b>they'd</b> 89:11
<b>supporting</b> 55:15 56:11 108:6	<b>talks</b> 154:12	<b>testify</b> 130:3 158:3	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	<b>thick</b> 122:7
<b>suppose</b> 149:6	<b>Tamara</b> 166:4 166:11	<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>Thanks</b> 28:3 49:19 104:20 137:4 162:17	<b>thing</b> 63:12 71:2 74:10 164:24
<b>supposed</b> 98:3	<b>Tammi</b> 47:18	<b>testifying</b> 100:3 100:6	<b>their</b> 3:16,18 7:23 9:13 11:19 15:4,12 24:3 26:24 27:8 29:21 32:17 59:15 60:1,1,6,8,11 70:17 72:12 73:3 76:24 77:3,4 83:16 86:10,16,19,23 88:17 89:23 98:7 118:6,10 124:11,21 125:5 126:16 137:20 142:8 152:7 155:8,10 160:17 162:23	<b>things</b> 69:23 90:2 91:18 93:6 94:2,3 124:22 125:16 142:17
<b>sure</b> 4:23 17:23 27:5 32:21 65:14,20 66:1 79:15 82:9 85:4 88:6 93:13 98:20 99:4 104:3 112:20 118:1 147:20 159:8 163:20,22	<b>task</b> 107:15	<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>Thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	<b>think</b> 14:17 15:3 17:22 18:2 35:21 47:24 48:10 49:8,15 51:24 53:9,12 53:20 54:14 63:7,9,11 64:12 65:14,15 68:19,20 69:8 70:7,22 71:1 76:5 77:10 83:19 84:12,20 84:21 85:5 91:5,14 92:4 95:5,8 98:5,12 101:15 102:10 106:8 109:11 110:22 132:15 134:8,9,14 138:6 139:19 153:20 159:13 164:16 165:18
<b>switching</b> 33:15	<b>tax</b> 151:13 159:11	<b>testify</b> 130:3 158:3	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	<b>third</b> 3:18 35:6,9 36:9,10 130:16
<b>sworn</b> 3:23 4:4 114:15,19 157:6,10 166:19	<b>technical</b> 19:5 55:16 107:23 118:11	<b>testifying</b> 100:3 100:6	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	<b>thoroughly</b> 142:22
<b>SWPPP</b> 74:5	<b>technically</b> 19:17 29:11 107:17 126:13	<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	<b>though</b> 35:20 126:13
<b>system</b> 40:4 67:14 103:23 129:2 154:23	<b>technique</b> 105:23 113:12	<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
	<b>technology</b> 102:8 105:14 105:17 106:23 107:3 160:24 161:1	<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
	<b>telephone</b> 23:15	<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
	<b>tell</b> 8:9 9:9 11:14 41:15 44:14 81:20,20 98:4	<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
	<b>temperature</b> 162:6	<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
	<b>temporary</b> 22:18,19,20,23 23:2 102:14	<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
	<b>ten</b> 32:7 61:19 61:19 63:5	<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
	<b>take</b> 9:20 16:4 16:12 25:20 54:13 60:19 62:18 71:6 114:1 127:10 131:16 136:14 139:3	<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
	<b>taken</b> 28:5 42:5	<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
<b>T</b>		<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
<b>tack</b> 22:3		<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
<b>tailing</b> 14:14		<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
<b>take</b> 9:20 16:4 16:12 25:20 54:13 60:19 62:18 71:6 114:1 127:10 131:16 136:14 139:3		<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	
<b>taken</b> 28:5 42:5		<b>testimony</b> 5:12 29:9 51:15 57:9,15 59:9 59:19 61:5 62:1 69:9 70:23 71:11,14 71:18 72:23	<b>thank</b> 11:7 65:18 72:2,5,6 83:7 105:6 111:12 112:22 113:15,16,19 114:3,10 122:8 144:20,22 156:12,16 159:1 162:12 162:14 164:17 164:20 165:19	

<b>thought</b> 34:17 87:24 102:12 146:6,12,16 148:12	118:12 <b>time</b> 5:17 7:5 8:23 9:13 10:3 10:14 16:8 18:6 20:13 24:6 25:1 26:8 26:24 27:22 28:23 31:10 33:13,14,20 35:22 36:6 40:5,8,10,11 40:16,18 43:4 43:18 47:12,13 48:3,24 52:12 54:5,8 56:1,2 56:17,23 59:8 67:18 69:22 71:15 73:3 82:18 83:11 89:7 90:21 91:2 94:12 103:20,21 107:13 110:21 111:2,3 114:11 116:24 119:4 124:9,14,20 125:2,8,22 127:4,6,11,14 127:16,20 129:2,7,9,11 131:8 135:19 138:19,24 144:9 146:9,16 155:23 156:1,2 156:6 159:10 159:13 160:3 160:14 161:18	163:3,7 <b>today's</b> 155:24 <b>together</b> 58:8 90:13 161:11 <b>told</b> 25:13,18 28:16 34:2 146:13 <b>ton</b> 58:12,14,22 60:19 97:21,23 106:16,16 107:11 112:17 112:18 158:19 <b>tons</b> 37:15,17,21 42:23 59:1 63:5 94:13,15 99:1 109:16 <b>tools</b> 161:4 <b>top</b> 74:11 150:18 <b>total</b> 22:18 23:2 35:1 36:5 44:20 61:21 100:8 102:14 127:24 144:14 <b>totally</b> 68:11 70:15 73:9 92:9 98:24 142:2 <b>Toyal</b> 117:14,19 149:8 <b>trace</b> 17:21 <b>track</b> 86:10 <b>transaction</b> 64:3 <b>transcribed</b> 166:9 <b>transcript</b> 164:7 166:7 <b>transferred</b> 131:19 <b>transpired</b> 49:16 <b>trigger</b> 38:22 74:3 94:17 <b>triggered</b> 29:12 38:20 83:15 <b>Trinity</b> 116:1 <b>trouble</b> 14:15 <b>true</b> 6:16 18:2 25:4 29:13,15 67:15 69:1	85:5 99:24 100:9 103:19 115:19 166:7 <b>try</b> 21:17 128:18 147:19 <b>trying</b> 46:16 85:15 89:10 96:2,11 141:12 147:17 <b>Trzuppek</b> 3:22 4:2,7,9 14:13 66:12 69:13 70:11 72:10 113:20 118:11 119:7,13 120:17 121:13 124:8,24 125:10,15 127:7 129:18 130:2,4,12,20 139:22 146:21 146:22 147:8 147:17,24 149:12,16 155:16 158:2 160:5,22 161:8 161:18 <b>Trzuppek's</b> 104:21 119:10 125:24 <b>TTE</b> 103:1 <b>tunnel</b> 16:3 <b>turn</b> 8:5,11 36:21 54:8 55:4 84:18 126:7 <b>turndown</b> 52:18 52:21 54:3 <b>turned</b> 8:16 131:18 <b>twentieth</b> 54:12 <b>Twenty</b> 37:3 <b>two</b> 11:22 12:2 13:14 17:13,14 23:1 30:17 84:14 85:6 90:1 115:8 117:19 120:1 123:7 132:12	132:15 134:6 136:22 149:4,7 154:10 163:9 <b>type</b> 5:20 13:9 38:3 43:1 49:9 69:16 70:13 98:8 110:13 141:9 147:21 <b>types</b> 21:5 73:17 117:2 125:18 141:1 <b>typical</b> 17:8 22:2 46:12 85:9,20 86:12,20,23 <b>typically</b> 20:5,8 23:1 43:6 52:18 61:11 86:15
<b>threshold</b> 30:3 30:20 38:1 45:7 58:21 60:20 83:18 92:20 94:10	89:7 90:21 91:2 94:12 103:20,21 107:13 110:21 111:2,3 114:11 116:24 119:4 124:9,14,20 125:2,8,22 127:4,6,11,14 127:16,20 129:2,7,9,11 131:8 135:19 138:19,24 144:9 146:9,16 155:23 156:1,2 156:6 159:10 159:13 160:3 160:14 161:18	<b>tools</b> 161:4 <b>top</b> 74:11 150:18 <b>total</b> 22:18 23:2 35:1 36:5 44:20 61:21 100:8 102:14 127:24 144:14 <b>totally</b> 68:11 70:15 73:9 92:9 98:24 142:2 <b>Toyal</b> 117:14,19 149:8 <b>trace</b> 17:21 <b>track</b> 86:10 <b>transaction</b> 64:3 <b>transcribed</b> 166:9 <b>transcript</b> 164:7 166:7 <b>transferred</b> 131:19 <b>transpired</b> 49:16 <b>trigger</b> 38:22 74:3 94:17 <b>triggered</b> 29:12 38:20 83:15 <b>Trinity</b> 116:1 <b>trouble</b> 14:15 <b>true</b> 6:16 18:2 25:4 29:13,15 67:15 69:1	<b>Uh-huh</b> 97:24 102:17 <b>ultimate</b> 123:4 126:17 138:5 <b>ultimately</b> 15:17 16:21 123:12 126:6,8 130:19 141:7 143:11 155:11 <b>unaware</b> 73:10 73:19 <b>unclear</b> 146:9 <b>uncomplicated</b> 75:1 <b>uncontrolled</b> 60:7,10 99:1 <b>undecided</b> 134:6 <b>under</b> 10:2 33:16 34:13 58:23 63:5 76:22 92:15 99:6 100:3,6 105:18 106:21 107:14 127:17 127:17,21 143:22 144:12 155:10 166:9 <b>undergraduate</b> 115:24 <b>understand</b>	
<b>throughout</b> 52:11 101:18 129:9	<b>timeline</b> 155:20 <b>times</b> 82:15 142:16 <b>timing</b> 28:24 145:24 <b>today</b> 3:11 27:14 69:13 100:3,7 103:21 129:20 145:4 147:11 148:8 149:11 151:19,21 152:13 161:24	<b>try</b> 21:17 128:18 147:19 <b>trying</b> 46:16 85:15 89:10 96:2,11 141:12 147:17 <b>Trzuppek</b> 3:22 4:2,7,9 14:13 66:12 69:13 70:11 72:10 113:20 118:11 119:7,13 120:17 121:13 124:8,24 125:10,15 127:7 129:18 130:2,4,12,20 139:22 146:21 146:22 147:8 147:17,24 149:12,16 155:16 158:2 160:5,22 161:8 161:18 <b>Trzuppek's</b> 104:21 119:10 125:24 <b>TTE</b> 103:1 <b>tunnel</b> 16:3 <b>turn</b> 8:5,11 36:21 54:8 55:4 84:18 126:7 <b>turndown</b> 52:18 52:21 54:3 <b>turned</b> 8:16 131:18 <b>twentieth</b> 54:12 <b>Twenty</b> 37:3 <b>two</b> 11:22 12:2 13:14 17:13,14 23:1 30:17 84:14 85:6 90:1 115:8 117:19 120:1 123:7 132:12	<b>U</b> <b>Uh-huh</b> 97:24 102:17 <b>ultimate</b> 123:4 126:17 138:5 <b>ultimately</b> 15:17 16:21 123:12 126:6,8 130:19 141:7 143:11 155:11 <b>unaware</b> 73:10 73:19 <b>unclear</b> 146:9 <b>uncomplicated</b> 75:1 <b>uncontrolled</b> 60:7,10 99:1 <b>undecided</b> 134:6 <b>under</b> 10:2 33:16 34:13 58:23 63:5 76:22 92:15 99:6 100:3,6 105:18 106:21 107:14 127:17 127:17,21 143:22 144:12 155:10 166:9 <b>undergraduate</b> 115:24 <b>understand</b>	
<b>throw</b> 86:15 <b>thrown</b> 69:23 71:6 <b>thumbnail</b> 104:1 <b>tickets</b> 27:8 <b>Tier</b> 74:2 <b>Tim</b> 63:7,8,11 63:18,23 74:8	<b>timeline</b> 155:20 <b>times</b> 82:15 142:16 <b>timing</b> 28:24 145:24 <b>today</b> 3:11 27:14 69:13 100:3,7 103:21 129:20 145:4 147:11 148:8 149:11 151:19,21 152:13 161:24	<b>try</b> 21:17 128:18 147:19 <b>trying</b> 46:16 85:15 89:10 96:2,11 141:12 147:17 <b>Trzuppek</b> 3:22 4:2,7,9 14:13 66:12 69:13 70:11 72:10 113:20 118:11 119:7,13 120:17 121:13 124:8,24 125:10,15 127:7 129:18 130:2,4,12,20 139:22 146:21 146:22 147:8 147:17,24 149:12,16 155:16 158:2 160:5,22 161:8 161:18 <b>Trzuppek's</b> 104:21 119:10 125:24 <b>TTE</b> 103:1 <b>tunnel</b> 16:3 <b>turn</b> 8:5,11 36:21 54:8 55:4 84:18 126:7 <b>turndown</b> 52:18 52:21 54:3 <b>turned</b> 8:16 131:18 <b>twentieth</b> 54:12 <b>Twenty</b> 37:3 <b>two</b> 11:22 12:2 13:14 17:13,14 23:1 30:17 84:14 85:6 90:1 115:8 117:19 120:1 123:7 132:12	<b>U</b> <b>Uh-huh</b> 97:24 102:17 <b>ultimate</b> 123:4 126:17 138:5 <b>ultimately</b> 15:17 16:21 123:12 126:6,8 130:19 141:7 143:11 155:11 <b>unaware</b> 73:10 73:19 <b>unclear</b> 146:9 <b>uncomplicated</b> 75:1 <b>uncontrolled</b> 60:7,10 99:1 <b>undecided</b> 134:6 <b>under</b> 10:2 33:16 34:13 58:23 63:5 76:22 92:15 99:6 100:3,6 105:18 106:21 107:14 127:17 127:17,21 143:22 144:12 155:10 166:9 <b>undergraduate</b> 115:24 <b>understand</b>	

68:18 71:7	<b>unreasonably</b>	99:20 100:4	<b>very</b> 7:24 8:1	<b>vs</b> 1:5
77:6 88:22	96:13,16	103:11 106:8	11:23 13:2	
89:10 93:20	<b>unrefurbished</b>	107:12 109:11	29:7 32:3,13	<hr/> <b>W</b> <hr/>
120:3 123:11	33:2	111:20 124:1	40:10 54:7	<b>WACC</b> 150:23
124:18 130:10	<b>unrelated</b> 67:23	129:13,15,17	62:7 65:19	151:2
136:15 144:6	68:8,11	130:10 131:10	71:1 97:8,18	<b>Wacker</b> 2:9
155:17 159:5	<b>unsupported</b>	132:21,23,24	98:1 112:1	<b>waiting</b> 64:8
<b>understanding</b>	51:19	133:9,13	125:11 135:4,9	<b>waived</b> 164:17
8:4 25:6 29:9	<b>until</b> 72:12	134:22 147:11	138:20,22,23	<b>walk</b> 27:13
29:13 35:10	77:20 79:24	148:11,15,20	139:4,5,15,18	63:22
39:16 60:22	124:15 131:6	149:21 150:5,5	139:19,23	<b>want</b> 8:21 52:23
72:14 92:13	<b>unusual</b> 64:6,20	151:2,13,13	148:24	58:15 70:21
94:4 99:13	73:14,18 89:5	<b>useful</b> 32:8	<b>viable</b> 14:20	89:8 92:8,9
106:13,19	<b>update</b> 161:13	<b>user</b> 61:6 128:6	<b>view</b> 49:15	94:18 97:12
108:9 113:8,14	<b>updated</b> 161:13	<b>uses</b> 15:24	141:15	98:19 99:2
119:23 120:22	<b>up-to-date</b> 6:17	<b>using</b> 13:19 26:1	<b>VILLASENO...</b>	153:6,20 163:1
124:9 129:22	<b>usage</b> 12:15	57:15 58:7	2:11 123:22	163:5 164:17
130:11 137:9	42:22 53:14,22	98:22 99:5	<b>violation</b> 8:20	<b>wanted</b> 8:5
137:13,18	92:22 162:1	101:5 103:11	9:4,7,12 23:16	16:15 18:4
141:20 147:17	<b>use</b> 12:21 13:4	106:16 108:13	24:9 28:23	36:1 152:17,18
147:21 161:17	22:18 42:13,18	109:3,4 113:3	41:18 43:11	165:1
<b>understood</b>	42:19 44:17	127:11 130:8	88:23 91:3,16	<b>Washington</b> 2:3
27:18 124:23	51:7 52:9	<b>utilize</b> 133:2	<b>violations</b> 7:17	<b>wasn't</b> 25:20
124:24 131:22	53:21 56:24	<b>utilized</b> 101:20	<b>violator</b> 123:13	36:7 80:2 84:2
140:19 144:7	67:13 76:2		123:16 154:13	93:17 126:13
161:20	77:10 79:5,13	<hr/> <b>V</b> <hr/>	154:21 155:6	148:12
<b>undertaken</b> 9:21	79:17 85:19	<b>value</b> 127:4,15	<b>virtually</b> 25:1	<b>waste</b> 73:24
<b>unexpected</b>	95:9 98:12	127:16,20	<b>virtue</b> 118:5	74:14,22
133:12	99:10,17 101:8	129:2,7,11	<b>visit</b> 7:20	<b>water</b> 74:3,5
<b>unit</b> 31:21 59:12	108:23 109:9	131:1	<b>visited</b> 72:12	<b>water-based</b>
60:3 61:5,10	120:9 133:11	<b>variable</b> 61:13	<b>vitae</b> 115:18,20	12:8,21 15:6
61:17 62:3	133:23 134:24	151:3	121:11	85:6 87:11,16
69:17,20 144:8	136:7 151:16	<b>variables</b> 82:14	<b>VOC</b> 17:8,16,18	<b>way</b> 5:18,23
<b>units</b> 62:3 64:9	158:11	128:14 132:18	18:12 21:4	10:19 18:10
87:18 90:8	<b>used</b> 5:1 11:23	141:3,7	37:20 44:20	81:8 86:9
162:2	11:23 12:8,12	<b>variance</b> 25:4	58:6	123:11 130:23
<b>University</b> 116:1	12:17 13:10	<b>varied</b> 61:14	<b>VOCs</b> 16:3,6	148:12 165:3
116:4	14:22 17:12	<b>varies</b> 53:19	37:19	<b>ways</b> 146:4
<b>unknown</b> 94:21	18:7 19:6 26:2	<b>variety</b> 117:2	<b>VOM</b> 11:24	<b>WCI</b> 133:24
133:12	27:7 31:21,24	<b>various</b> 9:24	27:5 72:11	150:14
<b>unless</b> 82:13	32:1,7,14,19	20:18 118:12	73:8 75:8	<b>website</b> 60:7
86:8	33:2,6,9,11	124:4 151:6	87:11,16 92:21	164:8
<b>unpermitted</b>	40:21,24 50:17	<b>vast</b> 14:21	93:5 94:13,16	<b>week</b> 85:13
73:16	50:24 51:4	<b>vastly</b> 98:15	105:19 112:17	86:21
<b>unrealistically</b>	53:17 55:21,24	<b>VataVuk</b> 161:8	158:20	<b>weeks</b> 45:16
96:23 97:11,15	58:20 62:4	<b>vendor</b> 32:2	<b>Vonco</b> 5:16 24:4	<b>weigh</b> 48:20
<b>unreasonable</b>	82:10 84:14	<b>Vendors</b> 31:15	29:10,15,17	69:4 71:23
53:13 96:7	85:16,17 93:6	<b>versus</b> 3:9	30:17 55:18	<b>weighted</b> 133:7
102:13	94:22 95:11	108:24 130:8	137:10 157:15	133:9,16,20
		133:15 136:16		<b>well</b> 5:16 9:1

23:15 27:4	60:24 62:22	79:11 81:19	34:7 35:24	135:16 143:14
34:2,15,19	63:5 66:8	90:12 104:8	116:22 117:23	144:1,8 150:3
39:23 50:3	71:15 72:15	114:1,8,12	131:19 132:8	<b>years</b> 4:18,23
55:22 62:22	73:3 75:11,14	122:4,7 123:8	145:15 160:20	11:11 32:7
67:14 68:12	75:15,23 76:6	123:9 127:4	<b>worked</b> 26:23	38:22 48:23
72:18 73:12	76:11,14,18	133:4 139:14	58:8 75:21	70:1 73:10
74:10 75:19	77:20,24,24	141:4 163:24	76:13 116:24	116:23 118:23
83:4 85:7	79:24 83:1,2	164:5	158:3 160:14	127:8 140:11
87:12,16 88:4	84:10,14 86:20	<b>we've</b> 48:13	<b>worker</b> 74:9	145:8,13
89:13 91:8	90:15,21,23	49:13 70:23	<b>working</b> 7:5	<b>YESENIA</b> 2:11
92:10 96:15	92:4,5,10,11	102:11 125:4	26:20 32:21	<b>yesterday</b> 3:4,16
98:5 101:15	92:14 93:3,6,7	130:6 148:14	75:7,11 84:8	18:18 21:19
110:8 112:8	93:10 94:8,22	<b>whatsoever</b>	159:11	51:16,17 52:14
123:3 124:6	95:15,18 96:17	21:12 100:6	<b>world</b> 57:2	54:17,20 61:5
127:2 132:9	99:1,18 100:22	<b>Wheeler</b> 2:6	73:16 86:1	62:1 71:10,18
134:2 136:6	103:10 104:7	64:13 65:2,16	96:18,19	72:23 74:12
139:12,22	104:11,13,14	67:23 121:20	<b>worn</b> 32:7	76:6 95:8
146:13 149:5	106:4 107:14	138:4 144:21	<b>wouldn't</b> 61:20	98:23 99:3
163:8	107:14,23	144:22 145:2	72:21 73:12	103:20 131:17
<b>well-known</b>	108:3,12,13,14	154:3 156:11	77:15 78:6	152:16,19,21
59:4	108:17,17	156:13 163:15	90:19 101:21	161:24 163:3,8
<b>well-supported</b>	109:3 112:19	163:18	109:22 152:24	<b>yielded</b> 129:12
133:24	114:7 117:10	<b>Wheeling</b> 60:8	153:1	131:14
<b>went</b> 7:10,14	119:11 120:4	68:15	<b>wrap</b> 49:18	<b>York</b> 1:11
42:1 66:12	122:20,21	<b>while</b> 141:6	<b>writer</b> 79:2	
76:18 99:3	124:12,13,16	160:22	<b>written</b> 81:13	<hr/> <b>Z</b> <hr/>
<b>were</b> 5:11 7:1,5	124:21,21,22	<b>whistles</b> 107:10	128:12 161:11	<b>zero</b> 126:15
7:23 8:3,15	125:1,10,17	<b>white</b> 84:19	161:12	
10:2 11:17,22	126:22 129:18	165:7	<b>wrong</b> 80:18	<hr/> <b>S</b> <hr/>
12:18 13:9,24	130:12 131:4	<b>whole</b> 160:18		<b>\$1,000</b> 112:18
14:3 15:4	131:17 134:20	<b>wish</b> 25:16	<hr/> <b>Y</b> <hr/>	113:3 158:19
16:14 17:24	135:2 137:14	162:22	<b>Yasmine</b> 41:18	<b>\$10,000</b> 99:17
18:11,18 22:1	142:4 145:4,12	<b>withdraw</b> 44:12	<b>yeah</b> 10:2 12:7	<b>\$10,911</b> 58:13
22:14 23:14,20	145:17,20,24	142:2 160:2	13:13 27:24	97:23
23:22 25:13	147:14,18,20	<b>witness</b> 3:19,21	30:18 52:4	<b>\$119,020</b> 129:12
26:20 28:16	147:22 155:15	3:23 4:3 20:10	56:22 60:18	<b>\$15,000</b> 100:8
29:2 30:2	156:22 157:14	48:21 49:14	65:24 69:1	130:21
31:11,17 33:10	158:6,8,19	64:14 71:11	75:23 83:13	<b>\$16,000</b> 135:15
33:14 34:9,13	159:10 164:4	81:21 83:1	84:23 85:3	<b>\$16,853</b> 131:15
34:16 36:3,11	165:3,6,20	114:15,18	89:16 91:11	<b>\$18,041</b> 58:11
38:8 39:23	<b>weren't</b> 48:11	138:11 157:5,6	95:13 96:9	97:21
40:3,6,16,18	104:13 163:19	157:9	101:20 107:9	<b>\$20,000</b> 99:20
40:20,24 41:22	<b>West</b> 1:22 2:3	<b>witnesses</b> 163:7	109:1 110:8	135:15
42:14 51:17	<b>we'll</b> 90:12	<b>word</b> 27:9 91:1	111:9 113:7	<b>\$200,000</b> 99:9
53:24 54:20	156:17	148:9	<b>year</b> 37:16,17,22	99:19
55:10,21 56:10	<b>we're</b> 3:2 8:8	<b>words</b> 88:18	53:19 54:1,9	<b>\$250,000</b> 101:14
57:8,10,11	34:22 47:17	<b>work</b> 4:20 6:22	54:14 60:20	102:4,21
58:2,20 59:21	55:2 57:20	10:4 11:17	61:20,23 83:15	103:12 120:20
60:12,14,16,18	64:7 66:9	14:23 27:4,16	100:8 116:7	149:20
			118:2 135:2,3	<b>\$3,707</b> 127:20



<b>\$30,000</b> 102:15 102:20 127:4,9 127:14,15,19	<b>17</b> 36:19 60:7,9 <b>191</b> 2:9 <b>1990s</b> 74:14 <b>1993</b> 72:16 <b>1995</b> 11:11 <b>1997</b> 25:9 76:9 76:18 78:17 124:11,15 126:12,22 127:12 128:24 130:23 138:24 146:6,7,14 157:23	127:8 <b>2008</b> 66:20 145:5,8 <b>2009</b> 1:1,12 3:4 3:11 46:6 47:17 50:4 156:3 164:9,11 164:13 166:20 <b>204</b> 22:14 23:2 81:2 <b>209</b> 1:11 <b>21</b> 17:2 165:11 <b>21st</b> 164:11 <b>218</b> 79:16 <b>218.105(c)(f)(c)</b> 83:6 <b>218.105(f)</b> 82:7 <b>218.401</b> 5:19 11:24 13:20 75:10 79:3 <b>22</b> 163:10,17 165:15 <b>23</b> 165:14 <b>23rd</b> 66:22 <b>24</b> 38:12 165:11 <b>24/7/52</b> 86:9 <b>25</b> 4:18 8:21 37:15,17,21 42:23 94:13,15 109:16 165:14 <b>25A</b> 17:13,15,21 80:1,2,6,15 81:8,12 <b>25th</b> 164:12 <b>25-ton</b> 44:22 <b>250,000</b> 103:2 <b>26</b> 37:9 165:11 <b>28</b> 39:9 165:12 <b>2800</b> 2:4 <b>29</b> 165:14 <b>29th</b> 3:4 163:3	41:24 163:3 <b>312</b> 2:5,10 <b>32</b> 165:12 <b>33</b> 41:15 42:1 151:16 <b>33-and-a-half</b> 135:6 <b>34</b> 41:23 42:3 <b>35</b> 5:19 43:16 <b>36</b> 43:16 <b>37</b> 151:14 <b>3700</b> 2:9 <b>39</b> 44:2 45:9 165:12	<b>56</b> 10:8 100:6 165:13 <b>569-1000</b> 2:10 <b>57</b> 95:2,18 158:1 158:2 165:15 <b>58</b> 67:20 72:1 165:16	
<hr/> <b>0</b> <hr/>	<hr/> <b>2</b> <hr/>		<hr/> <b>4</b> <hr/>	<hr/> <b>6</b> <hr/>	
<b>02</b> 26:6 91:9 <b>03</b> 63:13,19 <b>04</b> 63:13,19 <b>04-16</b> 1:5 <b>05</b> 63:8 <b>084-004560</b> 166:12	<b>2A</b> 37:14 <b>2.1</b> 84:24 <b>2.1-2</b> 85:2,9 <b>2.5</b> 53:16 <b>20</b> 32:7 36:21 37:2 52:19,21 <b>20.9</b> 99:1 <b>2000</b> 38:15 66:18 <b>2000-2002</b> 5:9 <b>2001</b> 7:4 11:11 72:13 78:17 84:14 91:23 <b>2002</b> 8:21 23:15 27:19 28:2,22 30:22 38:16 39:22 42:7 47:3 48:7 78:17 83:13 91:10,12,24 92:1 111:3 120:9,13 124:16 131:4 156:3 <b>2003</b> 33:19 37:7 111:7 <b>2004</b> 41:24 88:20 91:6 103:17 <b>2005</b> 66:22 <b>2006</b> 43:24 88:21 <b>2007</b> 119:4	<b>26</b> 11 49:24 50:5 <b>2A</b> 37:14 <b>2.1</b> 84:24 <b>2.1-2</b> 85:2,9 <b>2.5</b> 53:16 <b>20</b> 32:7 36:21 37:2 52:19,21 <b>20.9</b> 99:1 <b>2000</b> 38:15 66:18 <b>2000-2002</b> 5:9 <b>2001</b> 7:4 11:11 72:13 78:17 84:14 91:23 <b>2002</b> 8:21 23:15 27:19 28:2,22 30:22 38:16 39:22 42:7 47:3 48:7 78:17 83:13 91:10,12,24 92:1 111:3 120:9,13 124:16 131:4 156:3 <b>2003</b> 33:19 37:7 111:7 <b>2004</b> 41:24 88:20 91:6 103:17 <b>2005</b> 66:22 <b>2006</b> 43:24 88:21 <b>2007</b> 119:4	<b>218.105(c)(f)(c)</b> 83:6 <b>218.105(f)</b> 82:7 <b>218.401</b> 5:19 11:24 13:20 75:10 79:3 <b>22</b> 163:10,17 165:15 <b>23</b> 165:14 <b>23rd</b> 66:22 <b>24</b> 38:12 165:11 <b>24/7/52</b> 86:9 <b>25</b> 4:18 8:21 37:15,17,21 42:23 94:13,15 109:16 165:14 <b>25A</b> 17:13,15,21 80:1,2,6,15 81:8,12 <b>25th</b> 164:12 <b>25-ton</b> 44:22 <b>250,000</b> 103:2 <b>26</b> 37:9 165:11 <b>28</b> 39:9 165:12 <b>2800</b> 2:4 <b>29</b> 165:14 <b>29th</b> 3:4 163:3	<b>4</b> 121:3,9,10 122:13,14 <b>4A</b> 122:8,8,18 122:23 137:3,6 163:12,14 165:17 <b>40</b> 44:24 52:19 87:14 165:14 <b>401</b> 27:24 79:11 79:12 <b>41</b> 45:1 165:14 <b>42</b> 44:14 165:12 <b>42(a)</b> 123:20 <b>42(h)</b> 123:24 <b>43</b> 51:9 <b>44</b> 165:12 <b>45</b> 165:14 <b>48</b> 45:17 46:15 46:23 65:1,3 65:14 165:14 165:15 <b>49</b> 46:2,4,15,23 65:4,14 165:15	<hr/> <b>7</b> <hr/> <b>76</b> :5 66:19 165:10 <b>75,000</b> 100:22 <b>77.3</b> 18:16
<hr/> <b>1</b> <hr/>		<hr/> <b>3</b> <hr/>	<hr/> <b>5</b> <hr/>	<hr/> <b>8</b> <hr/>	
<b>1</b> 6:12,15 52:19 52:19,21 165:6 165:10 <b>10</b> 8:22 66:17 <b>10:40</b> 66:4 <b>100</b> 1:22 72:24 <b>11</b> 9:9 <b>11-500</b> 1:23 <b>11:45</b> 114:2 <b>119</b> 135:14 <b>12</b> 31:2 111:8 <b>12/31/02</b> 135:1 <b>12:45</b> 114:2 <b>12:47</b> 114:9 <b>120th</b> 52:21 <b>13</b> 11:14 37:7 165:6 <b>13th</b> 46:5 <b>14</b> 11:5 104:23 105:2 165:8,11 <b>14th</b> 164:9 <b>15</b> 102:15,20 <b>15,000</b> 36:8 <b>16</b> 86:20 165:11 <b>16th</b> 164:14 <b>16,800</b> 135:9 <b>16-hours</b> 85:12		<b>3</b> 50:4 80:8 115:10,12,17	<b>5</b> 6:5 53:2 67:1 67:13 <b>5,000</b> 54:14 <b>50</b> 64:12 65:15 65:18 165:12 165:15 <b>51</b> 165:15 <b>52</b> 165:12 <b>55</b> 50:10 165:12	<hr/> <b>9</b> <hr/> <b>9</b> 165:11 <b>9:00</b> 1:13 3:12 <b>90s</b> 101:18 <b>93.6</b> 18:16 22:2 <b>95</b> 54:9 <b>99</b> 15:4	