CHAIRMAN:
Q. So, I believe we are back to our continuation of yesterday's exercise.

MS. PAULA ELLIOTT, (PREVIOUSLY AFFIRMED) CROSS-EXAMINATION BY MS. JENNIFER NEWBURY (CONT'D)

MS. NEWBURY:
Q. Thank you, good morning. Good morning, Ms. Elliott.
MS. ELLIOTT:
A. Good morning.
MS. NEWBURY:
Q. First of all I want to refer to the questions submitted by Oliver Wyman to the Facility Association dated March 21st, 2014. It's Question Number 11. And if you just scroll back, you can actually bring up the question, the--I think it's at the bottom of the next-- of the earlier page, the previous page. That's it, perfect. Thank you. Now Ms. Elliott, I believe from your evidence yesterday you indicated that the reference there to 2004 was a typographical error, is that correct?
MS. ELLIOTT:
A. Yes, that's correct.

MS. NEWBURY:
Q. Okay. And the year that you intended to refer to was 2000, the year 2000?
MS. ELLIOTT:
A. Yes, that's correct.
MS. NEWBURY:
Q. Okay, and now did you alert anyone to that error, typographical error, before yesterday's evidence?
MS. ELLIOTT:
A. Did we do that? Well, certainly in my review before the hearing there I might have discussed that, yes.
MS. NEWBURY:
Q. Okay, there was nothing though to alert Facility to the -
MS. ELLIOTT:
A. No, I did not send a follow-up question.
MS. NEWBURY:
Q. Okay. Okay, and why is that? Why would you not have followed up with a question with the correct date?
MS. ELLIOTT:
A. I read their response. I--my understanding from their response was that they understood

that there was a change at 2004.
MS. NEWBURY:
Q. Okay.
MS. ELLIOTT:
A. Yeah.
MS. NEWBURY:
Q. So then, I take it then from your question, if it were corrected to refer to the year 2000, that you saw that--when you looked at it, you saw that the graph in the loss trend section show for BI evidence of an upward frequency trend prior to 2000, and then a decline in frequency trend after 2000?
MS. ELLIOTT:
A. In that range, that--in around 2000 - 2001 area that the frequency rate was increasing in the older period, and then after that time there started to be a decline in the frequency rate.
MS. NEWBURY:
Q. So around 2000?
MS. ELLIOTT:
A. Around 2000, and one of the things that's important to remember in Newfoundland which makes it more difficult to identify was there

was very large snowstorms in around that period as well. I think the frequency rate shot up to about 11 in that time period. Right, in 2001 it was very high.
MS. NEWBURY:
Q. Okay. So if we just scroll down a little bit to see the response from the Facility Association to that, okay, so you're now pointing out--and I don't know if we can make that a little larger there, the graph on the right, the actual fitted frequency. So you can see that there are a couple of high peaks I guess you would call it?
MS. ELLIOTT:
A. Um-hm, um-hm.
MS. NEWBURY:
Q. And one is around the year, you're saying 2001? Is that how you would read that graph?
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. Okay.
MS. ELLIOTT:
A. I think so, um-hm.
MS. NEWBURY:

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Q. And is that--do you associate that with the winter of 2001 that you're referring to?
MS. ELLIOTT:
A. Yes, that's my recollection.
MS. NEWBURY:
Q. Okay.
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. So it's your evidence then I take it that the decline in the frequency started at that time, in 2001?
MS. ELLIOTT:
A. I think that the decline in the frequency started before 2004, yes.
MS. NEWBURY:
Q. Okay, now the--just thinking generally now about your evidence yesterday, I had understood that the unusual winter of 2001 would really be an outlier? It would be out of keeping with events typically in Newfoundland?
MS. ELLIOTT:
A. There was an enormous amount of snow at that time.

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MS. NEWBURY:
Q. Yes, yes.
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. And I was here so I do recall that, but would that not be an outlier?
MS. ELLIOTT:
A. I think the frequency rate is very high at that point in time. I think it's -
MS. NEWBURY:
Q. Yes.
MS. ELLIOTT:
A. The highest point that's there is 2001-1 I believe is the peak.
MS. NEWBURY:
Q. Okay, and you wouldn't consider then that to be an outlier?
MS. ELLIOTT:
A. I--sorry, I did not say that.
MS. NEWBURY:
Q. Okay. So you do--do you agree-is it an outlier or is not an outlier?
MS. ELLIOTT:
A. I think it is an outlier.

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MS. NEWBURY:
Q. Okay.
MS. ELLIOTT:
A. I think it's extremely high and I think it's weather related, so it's unusual.
MS. NEWBURY:
Q. Okay.
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. So if you take that point out then if it's an outlier, and just thinking about it now from the layperson's perspective -
MS. ELLIOTT:
A. Sure.
MS. NEWBURY:
Q. - you're saying that a layperson should be able to look at these things and see?
MS. ELLIOTT:
A. I said that sometimes a layperson can do that.
MS. NEWBURY:
Q. Yes, you did.
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:

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Q. And so if we take out that particular point, in terms of the frequency, how would the graph look then to the layperson, is that high point isn't there?
MS. ELLIOTT:
A. I think you'd start to see if that was there, that the decline started as I said, more towards 2000 - 2001. That's how I see it.
MS. NEWBURY:
Q. But that would depend on that high point being in there, wouldn't it? If it -
MS. ELLIOTT:
A. No, if you drew it down so that it was similar, more in line with the point at 2002, then--and then started to decline there, it's exactly what I said.
MS. NEWBURY:
Q. Yes, okay. Well I would suggest that if you took out that high point in 2001, and put in a point that's more similar to the prior year and the subsequent year, that that point would be much closer to the existing red line that was drawn in my Mr. Doherty?
MS. ELLIOTT:
A. Well, I say that if you put it in, that that

was closer to 2002-1. It makes my point. So I mean, we're hypothetically saying, "What would it be if the snowstorm didn't occur?" But I believe that there was an upward pattern that was occurring from the '93. It's very--it's convoluted here because of weather-related issues, but I think the decline started before 2004. We see that in other provinces. We relate it. We see it in the US, and we relate it to technology with vehicles, the safety measures that have been installed in vehicles. It takes time for this to occur. Not every car is new on the road, but I believe that there's a relationship with vehicle safety and that the decline started, you know, in around 2000 - 2001.

MS. NEWBURY:
Q. Yes.
MS. ELLIOTT:
A. I don't believe that the pattern changed in 2004 as FA has presented. I think it was earlier. I think it's probably similar to the other provinces that we're seeing.
MS. NEWBURY:
Q. Okay. And is that the assumption that drove

your conclusion about the trend, or did you actually do any statistical analysis taking out for example that 2001 outlier just to see how the regression statistics would reveal themselves on that point?
MS. ELLIOTT:
A. Well I could do that, and we certainly have done that. And if--yeah.
MS. NEWBURY:
Q. But you haven't presented it in this particular case thus far?
MS. ELLIOTT:
A. I haven't been asked to present it.
MS. NEWBURY:
Q. I'm going to turn now to the exercise that we finished with at the end of the day yesterday. And I believe the documentation has been distributed to everybody.
MS. GLYNN:
Q. Yes, it would be Undertaking 20.
MS. NEWBURY:
Q. Okay, and I'm going to request that that be entered as Exhibits--I'm not sure we start with PE.
MS. GLYNN:

Q. It's entered as an undertaking.
MS. NEWBURY:
Q. Oh, it is entered?
MS. GLYNN:
Q. Yes.
MS. NEWBURY:
Q. That's fine. So they are called I believe Undertaking 20 through -
MS. GLYNN:
Q. It was all an undertaking.
MS. NEWBURY:
Q. Oh, was it all part of one package? Okay, thanks. So Undertaking 20, and I would ask that your refer to the first page of that, which is basically your insertions on the second page of Exhibit SD 2. And what you have done, Ms. Elliott, and thank you for that, you have circled the high points and low points that you had previously excluded. You determined that these were appropriately excluded from your regression model. And I'm going to request that you first of all go through the points from left to right and identify the nature of the point, whether it's a low-point exclusion or a high-point

exclusion, and also identify the value associated with that particular point.
MS. ELLIOTT:
A. Okay. I'm going to need a little more information because I can't quite see.
MS. NEWBURY:
Q. You might need to refer to the first page of SD--the SD 1 through 4 Exhibits for this.
MS. ELLIOTT:
A. All right. So there is 11-2, 7-2.
MS. NEWBURY:
Q. Okay, but--sorry, could you start with just reading from left to right, just to keep consistent through this? The first point on your left that you've circled, I understand that would be 2003 H1?
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. And is that a low point or a high point?
MS. ELLIOTT:
A. That would be representing the change from the prior period of minus 40 percent.
MS. NEWBURY:
Q. Yes, and what was that excluded because it's a

low point?
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. Or a low change in percentage?
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. Yes.
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. Okay, and what is the value actually associated with the data point that was excluded?
MS. ELLIOTT:
A. Four thirty.
MS. NEWBURY:
Q. Okay, and the next point, if you go--move to the right?
MS. ELLIOTT:
A. Is 2005-1, 46 percent decrease and that value is 211, so a low point.
MS. NEWBURY:
Q. Okay.

MS. ELLIOTT:
A. And then the next point is 2007-2, a 65 percent decrease, and that's 449.
MS. NEWBURY:
Q. I'm sorry, we've having--can you speak a little louder?
MS. ELLIOTT:
A. Oh yes.
MS. NEWBURY:
Q. Thanks.
MS. ELLIOTT:
A. I'm sorry, yeah. Okay, four forty -
MS. NEWBURY:
Q. Okay, so the third point was 449?
MS. ELLIOTT:
A. Right, that's 65 percent increase over the prior period. And the last one was 11-2, 475 and a 57 percent increase. So in this case, as we acknowledged already, the percentage change approach you know was not perfect, and we have reverted back to the dollar point. And the most earliest point that was excluded, in hindsight we could have not excluded that point.
MS. NEWBURY:

Q. Okay, and I'm -
MS. ELLIOTT:
A. And chosen a different one.
MS. NEWBURY:
Q. I will ask you a bit more about that, but I want to go through this exercise first for each of the four exhibits.
MS. ELLIOTT:
A. Sure.
MS. NEWBURY:
Q. So if we turn to SD 2.
MS. ELLIOTT:
A. Okay, all right. 2008-2, 302, it's a low point, minus 33 percent from the prior period, and 11-2 again, 475, a 57 percent decrease.
MS. NEWBURY:
Q. And that's a high point?
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. Okay, and SD 3?
MS. ELLIOTT:
A. Sorry. Okay. All right, 2002-2, seven--no, 315, the 50 decrease from the prior period.
MS. NEWBURY:

Q. So is that a low or a high?
MS. ELLIOTT:
A. That's a low percentage change. 2005-1, 211, it's a 46 percent decrease, so a low point.
MS. NEWBURY:
Q. That's 211?
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. Thank you.
MS. ELLIOTT:
A. 2007-2, 449, a 65 percent increase, so a high point; and 2011-2 again, 475, and again a 75 percent increase, a high point.
MS. NEWBURY:
Q. And SD 4?
MS. ELLIOTT:
A. 2007-2, it's 448, a high point, 65 percent. Look at that--oh, I apologize. 2008-2, 302, minus 33 percent, and 11-2, 475, a 57 percent increase.
MS. NEWBURY:
Q. Okay. Sorry, can you repeat that again?
MS. ELLIOTT:
A. Okay.

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MS. NEWBURY:
Q. What was the first point on your left for exclusion on SD Number 4?
MS. ELLIOTT:
A. Oh, I apologize, it's hard with all the Y and the yellows.
MS. NEWBURY:
Q. Yes.
MS. ELLIOTT:
A. Let me do it again. 2007-2, 267; 2008-2--sorry, the font is very small on this. It's very hard to read. 2008-2, 302, minus 33 percent.
MS. NEWBURY:
Q. So--okay, so the first on the left is which year, 2007 H2? And what was the number associated with that one?
MS. ELLIOTT:
A. Four forty-nine.
MS. NEWBURY:
Q. Okay. And then the next point excluded was?
MS. ELLIOTT:
A. It's 302, 2008-2. Have I got that -
MS. NEWBURY:
Q. Okay. Okay, so the first one was a high and

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the second one was a low?
MS. ELLIOTT:
A. Um-hm.
MS. NEWBURY:
Q. Okay. Just going back now to SD--sorry, the first page of U20, which is there before you, so it's noted there that three of the outliers or excluded points that you have identified are actually above the line that is identified as your trend line, and only one of the excluded points is below the line. Now yesterday in your evidence you indicated that a layperson should sometimes be able to identify outliers simply from looking at the graph. Now how would a layperson comprehend that you have a low outlier which is the first one actually above the line?
MS. ELLIOTT:
A. I think my point if you want to refer to the point how would a layperson decide that something might be an outlier, I think they'd look at the 2000, the high point that's up there, it's $700. And my point if you're asking how would a layperson look at a graph and say, "Gee, this"--"that might be a

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outlier," I think they'd look at that. If you're asking me how would a layperson look at these points and know that they were outliers, they'd have to look at the percentage change from the prior period. That's how they would do that.
MS. NEWBURY:
Q. Did you make a reference to 700? Was there a -
MS. ELLIOTT:
A. Yes, you asked me how would a layperson look at a graph, and I'm -
MS. NEWBURY:
Q. Yes.
MS. ELLIOTT:
A. And I'm suggesting a layperson would look at the graph and look at the high point. I said sometimes they could do that.
MS. NEWBURY:
Q. Okay.
MS. ELLIOTT:
A. That would be an example where I think sometimes they could do that. If you're looking at the points that have the red dots that we chose to exclude on a percentage

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basis, a layperson would have to get a calculator out, understand that we're looking at the percentage change, and then choose those dots.
MS. NEWBURY:
Q. Okay, so you still stand by your position that these are actually outliers?
MS. ELLIOTT:
A. I stand by my position that we chose this method hoping that that would finesse our model, our approach, on a percentage change basis. I've acknowledged we tried it. Not that great. You know it didn't work. We have now gone back to a dollar basis. I've acknowledged that if we use a dollar basis, our loss trend rate is at a larger negative than what we had calculated. So yes, you know, I agree, you know in hindsight looking back the percentage change approach wasn't the best approach. Yeah.
MS. NEWBURY:
Q. Okay. And now at the time of course in the model that's presented here in your report for the Board, the exercise has actually resulted in the exclusion of three data point that are

on the higher end?

MS. ELLIOTT:

A. That's correct.

MS. NEWBURY:

Q. Yes, and only one below?

MS. ELLIOTT:

A. That's correct.

MS. NEWBURY:

Q. Which would tend to result in a lower line or lower -

MS. ELLIOTT:

A. Well -

MS. NEWBURY:

Q. - or decreasing trend?

MS. ELLIOTT:

A. I guess it's a perspective because as we said or I just stated, that if you use the dollar approach, and looked at the ones that are at a high and the low, we end up with a larger negative overall trend. So not necessarily what you have just said is correct.

MS. NEWBURY:

Q. Well, I'm focusing on this particular exercise here. I'm not looking at a comparison between the dollar points and the change in value.

I'm just looking simply at this change of value.

MS. ELLIOTT:

A. Well, I was hoping my comment would be helpful

MS. NEWBURY:

Q. Okay. But looking again at this particular graph here, and seeing where those outliers were excluded, they are--if you look--aside from the one in around 2001, these are all the three of the highest points that you've excluded, and only one low point has been excluded?

MS. ELLIOTT:

A. That's correct.

MS. NEWBURY:

Q. And if we turn to the next graph, SD 2, both of the data points that you have excluded are actually above your line that you've derived, your trend line? One is slightly above, but the other is well over.

MS. ELLIOTT:

A. Yeah, and in fact the result is really indifferent to the exclusion of that point because it's effectively on the line. We get the same answer either way, but you're right

that both points are effectively above the line, but the exclusion of that point 2008 has less of an impact.

MS. NEWBURY:

Q. But you're saying that if you exclude a point that's on the line, it doesn't matter, but you've talked about having the balance approach of excluding a high and excluding a low?

MS. ELLIOTT:

A. Yes. No, you're -

MS. NEWBURY:

Q. So you lose that effect?

MS. ELLIOTT:

A. You're absolutely right, that both points are above the line.

MS. NEWBURY:

Q. And if we turn to the next page, SD 1, you have two points that are above the line, one that is--I'm not sure if it's on the line or perhaps slightly below the line, but it's very, very close to the line.

STAMP, Q.C.:

Q. SD 2?

MS. NEWBURY:

Q. SD 3. And one is below the line, so the same sort of situation where you seem to be excluding more higher points than low points. And on the final graph, SD 4, you have two points that are above the line, one is very close to the line, but it's still above the line. And of course you lose the balancing effect that you've emphasized about excluding highs and lows in equal number, and you're agreeing with that?

MS. ELLIOTT:

A. Well I'm agreeing that we've taken the one high point out that's there. The other point is very close to the line.

MS. NEWBURY:

Q. Okay.

MS. ELLIOTT:

A. Yeah.

MS. NEWBURY:

Q. And there's no other lower point taken out to balance?

MS. ELLIOTT:

A. Um-hm.

MS. NEWBURY:

Q. And you didn't, as I understand it, do any

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sort of statistical tests to confirm your decision to exclude outliers? You've designed an approach, in fact you designed the approach well before your report for May 2014? It's an approach that you've used frequently, almost all the time. Every year you have high points and low points that you've excluded?
MS. ELLIOTT:
A. This is not from May '14.
MS. NEWBURY:
Q. Oh, but you've referred to this -
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. - in your May 2014 report?
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. So it's incorporated into your May 2014 report?
MS. ELLIOTT:
A. That's correct.
MS. NEWBURY:
Q. And you didn't change it in your May 2014 report?

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MS. ELLIOTT:
A. No, uh-uh.
MS. NEWBURY:
Q. Okay, so you've endorsed this approach for your May 2014 report?
MS. ELLIOTT:
A. We have used the loss trend rates that we derived from our board line--guideline loss trend rates, yes.
MS. NEWBURY:
Q. Okay. And would you agree that none of these excluded points are true statistical outliers? They're basically data points that you've excluded based on your model of excluding highs and lows?
MS. ELLIOTT:
A. No, I wouldn't agree that none of them are true statistical outliers, no.
MS. NEWBURY:
Q. Okay. And--but you haven't done any tests, any testing to verify whether or not they are statistically speaking outliers?
MS. ELLIOTT:
A. I--we have taken an approach where we exclude the two high and the two low. We used a

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percentage change approach. In hindsight, we think staying with the dollar approach that we had used previously was a better approach for a variety of reasons. And you know, we acknowledge now that if we had used the dollar approach, our findings would have shown a lower loss cost trend rate, and we have used this approach of taking out two high and two low so that we have a stable approach in our review of loss trend rates that we do each six months.
MS. NEWBURY:
Q. Ms. Elliott, if you can turn to the page, the second page of Undertaking 20 and look at your first exclusion, your first data exclusion which is a low of 2008 H2. Is that a statistical outlier?
MS. ELLIOTT:
A. It's the low percentage change over the period that we're looking at. So we look at the percentage change and we were excluding the two low percentage changes and the two high percentage changes. That's what's those points are.
MS. NEWBURY:

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Q. So I understand on your model that it is a point that you've decided to exclude, but my question, is there any sort of statistical support for that exclusion? Is there a test to show that this point is not a point that typically would happen? That's what I understood an outlier was.
MS. ELLIOTT:
A. It's the approach that we've used. We've used the--we have excluded two high and the two low points.
MS. NEWBURY:
Q. Okay.
MS. ELLIOTT:
A. That's what we've done. There's not a test that says that excluding the two high and the two low is--it's an averaging approach that we've used that we hope smooths out the loss trend rate.
MS. NEWBURY:
Q. Okay. But there's no statistical test that has -
MS. ELLIOTT:
A. There is -
MS. NEWBURY:

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Q. - been used by you to support that?

MS. ELLIOTT:

A. No, it's an approach that we've used to incorporate stability. We take this average, we do it four different ways, we incorporate our selection from the prior period. We're trying to take a responsive and stable approach.

MS. NEWBURY:

Q. So your emphasis, your objective here is stability, and not necessarily identifying outliers as you've described them yesterday?

MS. ELLIOTT:

A. Our approach is to provide a loss cost trend rate that we think is stable and responsive to the data. The data as we stated yesterday is not credible, it's very volatile, it's very challenging. So what we're trying to do here is estimate a loss cost trend rate that we think is reasonable, reflective of what we've been doing in the past. That's what we're achieving to do here.

MS. NEWBURY:

Q. You've described outlier yesterday, and I guess I'm having great difficulty trying to

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understand your points that you've drawn in on the graph as compared with your evidence yesterday. I can't seem to fit the two together. So yesterday for example you said, "So if you take all your data and you run--try to fit a line to it, and maybe you have a really good fit, but you've got one piece of data that's different from the actual experience, is really why it's much higher or much lower, whatever the case may be, you consider that an outlier." But if I look at that first point there, it's right on the line. It doesn't seem different from the experience at all.

MS. ELLIOTT:

A. Yes. So let me repeat myself again. The points with the red dots are the high and the low on a percentage change. Our approach was to exclude on a five-year basis the one high, the one low percentage change, and on a ten-year basis, the two high and the two low percentage change. That's what we chose to exclude, and one commonly calls those points that we exclude--you know, you make different decisions to why you exclude them, but that's

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the approach that we used to exclude those points. That's what they are.

MS. NEWBURY:

Q. Okay. Now the problem is of course you end up excluding data points. I know that you've derived it from the percentage change from the previous season, from the previous year, but you end up excluding a point that's basically right in the midst of the rest of the data. It seems to be totally in keeping with the rest of the data.

MS. ELLIOTT:

A. Yeah, and you're right. So when you take away a point that's on the line, you really don't get much impact from removing that point. You're right.

MS. NEWBURY:

Q. But the impact that you get is that your model is based on excluding highs and lows equally?

MS. ELLIOTT:

A. Our model is providing, you know, an estimate of excluding the two high percentage changes and the two low percentage changes. I know I'm repeating myself, but in hindsight we think taking the dollar approach would have

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been preferable. We've reverted back to that. I've expressed and I've provided to you that if we use a dollar approach, we get a larger negative trend rate. And you know, in hindsight we tried something and as I expressed, it didn't work and you know, we're trying to look at the data and try things, and in hindsight it didn't work. So -

MS. NEWBURY:

Q. Ms. Elliott, the percentage change approach--it was the percentage change approached that you used. From what I understand you've referred to it in your December 2012 and your June 2012 Trend Report for the Board, for the Newfoundland Board, and you've also referred to it in your May 2014 Report. It's the underlying basis for your conclusions in your May 2014 Report. What happened in 2013, did you prepare any reports that used a different approach?

MS. ELLIOTT:

A. Yes, we used a dollar approach.

MS. NEWBURY:

Q. Okay. And why when you did your May 2014 Report did you revert back to the percentage

change approach?
MS. ELLIOTT:
A. We didn't revert back to it. In our review of the rate filing it's appropriate that if FA chooses to use the data as of the end of December 2012 and that those loss trend rates were provided for the guideline loss trend rates were provided to all insurers as a basis. When we test rate filings to be consistent and fair with all insurers, we would use the same numbers. If we had chosen to revert back, as I expressed, we'd have a larger negative and so the 20-odd percent rate increase that we have provided as what we find reasonable, would be even lower. So I don't think that would be fair to FA for us to do that.
MS. NEWBURY:
Q. Ms. Elliott, you've emphasized in your evidence and there's been a significant emphasis in the questions put to Mr. Doherty both in, you know, the written questions and answers and the examination here about the change in Facility's approach between this hearing and the last hearing, the last rate

application, sorry. And you I believe have been critical of the fact that there have been changes in the approach and there seems to be some reluctance when an actuary changes his or her approach or in fact the Facility has different actuaries and there's been a change in approach, but here in the midst of this hearing you've changed a significant, I would suggest a very significant feature or element of your approach, and in fact not only have you changed it in the midst of the hearing, from those looking at it from our perspective, but it's been after the evidence has been given by Mr. Doherty.
MS. ELLIOTT:
A. I'm sorry, I haven't changed anything in the midst of the hearing. I've acknowledged that reports that we prepared as in June 2012 and at December 2012, they were different than the report we prepared previously. And then since that time for our reports using data as of June 2013 and December 2013 changed. The change did not occur in the middle of this hearing at any point in time.
MS. NEWBURY:

Q. But alerting the Board and alerting other participants in the hearing that you now have a--you now would look at this differently. You would not now look at the percentage change?
MS. ELLIOTT:
A. FA was provided a copy of our report for their comment. FA--my understanding is the Board provides FA a copy of all our loss trend reports. They have an opportunity to comment on those. They have an opportunity to read them and acknowledge that there was a change from percentage basis to a dollar basis. This is not new information at all. It's been provided to FA in the past.
MS. NEWBURY:
Q. But you're now saying in the hearing yesterday and I guess we had a hint of it on Friday when you provided some additional charts with the dollar values. That's new information to the participants in the hearing that you would now prefer the approach of looking at the dollar values, and you would not now focus on the percentage change.
MS. ELLIOTT:

A. I think me, sitting here, and articulating that quite clearly I hope, that we changed to a dollar basis, I think if you're an actuary reading the report, you would see that and read it, but if you're asking me that that subtle change that the Board read our report and understood that correctly, I don't know. I can't speak for the Board, but it is in our reports. We made a change. If you read our reports, you'll understand it. If you don't read the reports or not concerned about it, you won't know that.
MS. NEWBURY:
Q. You've also suggested that the reason for changing this is because the approach of the change of the percentages between consecutive seasons, it's difficult to follow, and that the dollar basis exclusion is cleaner and everyone call follow it, but I would suggest that it's more than just the comprehensiveness of your approach. You actually end up with different outliers. You end up with something that looks a bit peculiar to most people. You have outliers that are often above your line, and more high outliers than low outliers.

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MS. ELLIOTT:
A. As I expressed, we thought this might be helpful because we're trying to measure the percentage change. That's what the loss trend rate is, what the change is from period to period. So the approach was to see if we excluded the high percentage change and the low percentage change, perhaps that would finesse the model. In hindsight, we acknowledge there's difficulties with it, so we've reverted back to the dollar basis for excluding the high points and the low points. It's easier for people to understand. That's -
MS. NEWBURY:
Q. And Ms. Elliott, in your reports--in your report to the Board, where do you describe the change in your approach? You said it was obvious for people to read that? Where do you insert that in your report?
MS. ELLIOTT:
A. There's a footnote in the reports at the bottom of it, you know, in the section that we reference that this is a change from our prior approach where we exclude the high-lows,

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that's provided.
MS. NEWBURY:
Q. And in your 2013 reports to the Board, do you then identify that you've changed back to the dollar-value approach?
MS. ELLIOTT:
A. I cannot remember at this point exactly what we said, I don't know.
MS. NEWBURY:
Q. I'm going to request that you check the 2013 reports to see if you have identified there that you've reverted back to the dollar-value approach.
MS. ELLIOTT:
A. Okay.
MS. NEWBURY:
Q. Okay. I guess the concern, if you've put that information in a footnote as opposed to, you know, going into more detail when you've changed your approach, whether you're changing from dollar value to the percentage change or from percentage change back to dollar value, is that enough emphasis or description of that particular change?
MS. ELLIOTT:

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A. I hope it is. That was the intent, that the reader could see that it was footnoted, you know, with the high/low and we had a footnote to that, what that meant, so I hope the reader read it.
MS. NEWBURY:
Q. Okay, and I guess I'm just comparing it with the--I guess the emphasis in this hearing and the questions leading up to it. I mean, Mr. Doherty's explained, but he's been asked in detail and it seems like what is requested of him is an elaborate explanation, a very detailed explanation of each and every change from this hearing to the previous rate application.
MS. ELLIOTT:
A. Well, I can list off at least four or five changes that FA has made from its prior approach to this rate filing. I don't think you can--I think this is a change that we've made, we've acknowledged the change. The changes that we have outlined that FA has made are quite substantive, including the reform factor change.
MS. NEWBURY:

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Q. And but your footnote really is a passing comment on your change and not the same sort of elaborate explanation that has been requested of Mr. Doherty?
MS. ELLIOTT:
A. Well, if the users and readers of our report would have a question on that, we would have been more than happy to discuss it or explain it.
MS. NEWBURY:
Q. And referring now to Page 1 of CAOWOO1, and at the bottom page--the bottom paragraph, and we've referred to this yesterday but I'll go back to it again because this is of some importance. You state at the bottom, "for this reason we modeled the data several different ways in an attempt to identify the underlying trends during the experience period with and without certain data points that are considered to be statistical outliers, and over time periods that are longer than the experience period as a means of increasing the stability, reliability of the data being analyzed." So again you're referring to the excluded data points as statistical outliers,

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but yet you've not been able to provide or point to any statistical test that has been performed or could be performed to substantiate that.

MS. ELLIOTT:

A. Yes, as I said, the approach that we've taken is to exclude the two high and the two low on a percentage basis or on a dollar basis. That is the approach that we present in our report of what we're excluding.

MS. NEWBURY:

Q. Yesterday in your evidence you said "I don't think there's a statistical approach that I'm going to reference. It's the approach that we've taken to try to smooth out the effect of the highs and the lows." The extremes we are taking--I don't have--there's not a name for it.

MS. ELLIOTT:

A. That's correct. It's taking the two highs and the two lows, we--there's not, as far as I know, a name for that. That's the approach that we've taken, that's our judgment.

MS. NEWBURY:

Q. And now that you've reverted back to the

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dollar-value approach, you still have the same mechanical approach of excluding two highs and two lows for the ten years, and the one high and one low for five years?

MS. ELLIOTT:

A. I think the word mechanical might have a meaning that's not intended, but we do, on a consistent basis. We try to present our reports so that they are stable, and so what we do is take a ten year ending--in this particular example, a ten-year ending December 12, a ten-year ending June 2012, we exclude the two high and the two low. WE do the same with the five-year data, excluding the one high and one low. We calculate those results, then we look at what we selected, the prior report, and we average that in. And we're trying to present a lost cost estimate that is stable from report to report. This data is so volatile that if we, you know, did different things each time, we would have very different numbers. We would have a report that one time is -5 and the next time is +5 every six months, and that's not really a good measure of what the changing costs are. So that's why

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we have the approach that we have, trying to make it both responsive and stable.

MS. NEWBURY:

Q. But how does the mechanical, and I think that meaning is intended because it certainly seems to be a mechanical approach. If you mechanically take out two highs and two lows, how does that eliminate the volatility in the data, especially when we look at situations in your Undertaking 20 where you're eliminating points that are right on the line. That doesn't seem to be taking care of any volatility issue.

MS. ELLIOTT:

A. As I said, we do think that going back to the dollar approach, in hindsight now, is better. We're doing that now. We acknowledge that if we had used the dollar approach, where you would definitely have the highs and lows that were excluded, you get a larger negative trend. I think the intention is to smooth out the loss trend rate that's calculated. We can't eliminate the volatility in the data, it is there, but it's an attempt to smooth out the points that are included in the regression

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model and see what that loss trend value is that you calculate.

MS. NEWBURY:

Q. And in terms of reverting back to the dollar value, there's nothing to show that you've done any statistical analysis to verify whether the excluded points are indeed outliers. So we could end up with the same types of problems that we have right here, where you have lows above the line and -

MS. ELLIOTT:

A. No, you wouldn't.

MS. NEWBURY:

Q. How would you know that if you don't do the test?

MS. ELLIOTT:

A. Because we would look at the--we have the fitted and the actual values.

MS. NEWBURY:

Q. And how would you know whether or not they are true outliers if you've actually excluded them before you've done your regression?

MS. ELLIOTT:

A. Well, we do the regression including all the data points and we do the regression excluding

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data points. So we would know.
MS. NEWBURY:
Q. But you don't present that, and you haven't presented it for the Board.
MS. ELLIOTT:
A. I could present it for the Board.
MS. NEWBURY:
Q. Yeah, but you haven't done that?
MS. ELLIOTT:
A. If I was asked, I would.
MS. NEWBURY:
Q. And you haven't done any P-values or T-statistics or look at the residuals, any of the types of exercises that Mr. Doherty does when he looks at that?
MS. ELLIOTT:
A. I do do that. I do -
MS. NEWBURY:
Q. But I haven't seen any for.
MS. ELLIOTT:
A. Well, you didn't ask for it.
MS. NEWBURY:
Q. Okay, but it was only now that I have learned that you've reverted back to the dollar value approach.

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MS. ELLIOTT:
A. Well, maybe Mr. Doherty could have told you.
MS. NEWBURY:
Q. I'm not sure that it was clear to people that you've reverted back to an approach when we get the exhibits on Friday afternoon. And just referring back now to your Undertaking 20 and to Mr. Doherty, as the one who has provided the P-values for your different models, and looking at those P-values, what do you think of these four models being used in your regression analysis?
MS. ELLIOTT:
A. So this is the one you have up here of five year? Sorry, is this the five-year--I want to match up--five year ending -
MS. NEWBURY:
Q. So SD1 is the ten-year ending December--well, it's 2012-2.
MS. ELLIOTT:
A. Okay. I think to answer that--okay, so I think the point was that when we look at--can we scroll to the top so I can see what this report is, please? All right. Thank you. I want to present an exhibit where we showed a

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summary of the R-squares, if we could have that on the screen, please.
MS. NEWBURY:
Q. I'm asking about the P-values.
MS. ELLIOTT:
A. I know.
MS. NEWBURY:
Q. Do you understand the P-value information that's here on this exhibit?
MS. ELLIOTT:
A. I do, yes.
MS. NEWBURY:
Q. Can you explain it?
MS. ELLIOTT:
A. I am going to. If we could have the R-square report up, please? There is it, great. So the reference, if I believe, is to the ten-year ending December 2012 report. We've provided here the lost cost trend rate at -1.7 percent. The severity trend rate here is +1.9 percent, and the frequency trend rate is -3.6 percent, and the combination of -1.7. And one of the things that's important to remember when you're looking at a R-square, which is a quoted or (phonetic) or an adjusted R-square,

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is that sometimes that value can be misleading, and in this case we have to remember that the lost cost is made up of the frequency and the severity. So even though we might be referring in a lot of our discussion here, what we're looking at it lost cost. It really is frequency times severity gives you the lost cost. So in this case, when we look at R-square, the R-square for the frequency is, you know, relatively good. The adjusted R-square is .5788, it's superior--slightly better--I shouldn't use that word, anyone shouldn't--slightly better than FA's model at .5222. The severity trend, at 1.9 there's an R-square, and the severity trend, this is where we have that volatility in the data, up 75,000 average amount, down to 35,000--very tough to fit that data. So when we look at the models, we see that the R-square here for this ten-year model is point--the adjusted R-square is .05, but that's not really a good measure of that model, because you can see the frequency is good, the severity is so/so, the severity is so/so for everything. So that is what you should focus on. So when you look at

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the lost costs and the adjusted R-square, it's poor, but that's not what we should be looking at. We should be looking at the frequency and severity which combined get a lost costs, those R-squares. So when you look at the regression stats on a lost-cost basis, and you look at the P-value and you look at the T-test and the R-square, when you have one trend going up and one trend going down, you're going to get close to zero and that lost cost statistics are going to be poorer, but the underlying statistics for the frequency and severity that make up that lost cost trend will be reasonable, as we're looking at here. So it's important to keep that in mind. So we go back to the P-test that was referenced. The P-value, if you're seeing--I understand the standard that FA likes to use is .05. So the P-value and R-square value or the adjusted R-square values--you can see them there, they're highlighted and they match what we were just looking at in the chart that we prepared. They are not good, but they're not a fair comparison. The real comparison is to frequency and severity. So you may look at

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these stats and say, oh, isn't that horrible, why would you use that? And the real answer is that we're not using that. We're looking at the frequency trend, which is declining, and we're looking at the severity trend that's increasing, and the two combine separately make up the lost cost trend. So when you want to look at your model and understand the results. It's flawed to just look separately at the lost cost stats if you have two underlying trends that are in different directions.

MS. NEWBURY:

Q. Now Ms. Elliott, I understand that it's been the approach of Facility to look at that, but it seems that our approach is to focus on the combined severity and frequency trend, and in this case here you have a situation where your P-value is not good for what--for the combined results. Should that still not mean that this is not reliable?

MS. ELLIOTT:

A. I'm sorry, perhaps you didn't hear me when I was just explaining that we look at the frequency, we look at the severity in every

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regression model that we run. We look at lost cost, frequency and severity and those statistics. So I don't think that saying that we don't look at them is correct.

MS. NEWBURY:

Q. Now you've mentioned that the frequency and severity, you multiply them to get your lost cost? Do you actually do a separate regression analysis of your lost cost, or do you take your regression -

MS. ELLIOTT:

A. We run all three at the same time.

MS. NEWBURY:

Q. You do do a separate regression analysis?

MS. ELLIOTT:

A. Well, not separate. All three are done at the same time, instantaneously, all three.

MS. NEWBURY:

Q. Okay, but do you take your results from your severity and multiply it by your frequency in order to get your regression statistics for lost cost?

MS. ELLIOTT:

A. Well, we look at the regression statistics for frequency, we look at the regression

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statistics for severity and we look at the produced, as in this case, regression statistics for lost costs.

MS. NEWBURY:

Q. What do you mean, the produced regression statistics?

MS. ELLIOTT:

A. Well, they're in front of you.

MS. NEWBURY:

Q. Okay.

MS. ELLIOTT:

A. So when you run an Excel model, you can incorporate regression statistics, which we do.

MS. NEWBURY:

Q. Refer to CAOWOO1, and the bottom paragraph of that page--sorry, Page 3. Okay, and this is your trend report and this is a generally commentary about the consideration of severity, frequency and lost cost trend patterns, and you state that "in selecting past and future trend rates by coverage, we typically examine the separate trend patterns for claim severity and claim frequency, and then combine the selected severity and

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frequency trend rates to arrive at a selected lost cost trend rate. However, our review of the severity and frequency trend patterns over the recent pasts suggests to us that we may not fully reflect the correlation that seemingly exists between severity and frequency, if we select severity and frequency trend rates over different time periods. For this reason, we tend to select past and future trend rates by directly examining the trend pattern for lost cost."

MS. ELLIOTT:

A. Um-hm.

MS. NEWBURY:

Q. Okay. So this seems to suggest that you're focusing on a combined approach and that you don't look at the separate approaches anymore.

MS. ELLIOTT:

A. Yes. Well, I apologize a bit. If you're reading it that way, that was not the intention. I think the message that we wanted to get across here was that if you use different time periods to--maybe if you use 20 years for severity and 5 years for frequency, that you can find a mismatch, that there may

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not be correlation--you're missing something between the impact of what might be happening with severity and what might be happening with frequency. Say for example if the frequency is really high because there's a--you know, a bad winter, and often those claims will be smaller claims, more bumper claims, and so often the severity might drop when the frequency goes up, because there's more small, little bumper claims. So if we use different time periods, maybe, you know, a long period for severity and a short period for frequency, you can kind of get a mismatch of the data. So what we were trying to express here is that we want to look over the same time period, but our model, which we've been using for a long time, calculates, at the same time, the severity trend rate, the frequency trend rate and the lost cost trend rate all together. So when I look at it, it's all on the screen, all three of them. I don't just look at lost cost and I don't just look at frequency and severity; I look at all three.

MS. NEWBURY:

Q. I don't see any reference here in that

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paragraph to time periods. You're talking about the reluctance to look at it separately, the frequency and severity separately, because differing time periods might not result in something logical, but I don't see a reference here to time periods at all, and why could you not look at severity and frequency separately using the same time periods?

MS. ELLIOTT:

A. We do look at frequency and severity and lost cost using the same time periods.

MS. NEWBURY:

Q. Okay. I'm going to request that you provide the P-values and T-statistics for the separate reviews that you've done on frequency and severity for each of your regression analyses that you've produced. (REQUEST)

MS. ELLIOTT:

A. Okay.

MS. NEWBURY:

Q. You have provided some reports recently to the Nova Scotia Board and I understand that you're approach might not have been the same for Newfoundland. Did you ever, for Nova Scotia, rely upon the percentage change approach?

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MS. ELLIOTT:

A. To the best of my recollection, no, but I would have to check. I'm not positive.

MS. NEWBURY:

Q. Well, I would request that you just verify that. (REQUEST) And what would be your rationale in using a different approach to the Nova Scotia Board as your report to the Newfoundland Board?

MS. ELLIOTT:

A. In terms of Nova Scotia, there's a slightly larger volume of data. As I mentioned yesterday, the Newfoundland commercial is our most challenging piece of data to work with. There are only, roughly, for bodily injury, about 120-odd claims a year. It's very small. So we take a different approach, a slightly different approach in Newfoundland, and in each province. We do something different in Ontario, Alberta. They're all different.

MS. NEWBURY:

Q. But how would using a percentage approach address the fact that you have a smaller sample in this province?

MS. ELLIOTT:

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A. Well, I think, as I expressed, that we were trying to find a way to do the best job we could, we thought that might help. It is the smallest volume of data that we're working with. It's something that we tried, and I acknowledged that we tried it and we think that doing what we previously did is better.

MS. NEWBURY:

Q. And wouldn't the focus on the percentage change from one period to the next really be a focus on the noise, the fluctuation in costs from year to year, and not on the overall trend?

MS. ELLIOTT:

A. Well, that's the idea, that when you have noise in your data or volatility--there's the old expression "noise and signal" that came from work--in radio frequency work, but when you have noise in your data, which we clearly do have here in Newfoundland because of the small volume, trying to exclude a large percentage change or a low percentage change--the idea is to try to minimize those extreme percentage changes from what you're trying to measure, the year-to-year change, what is the

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percentage change in costs over time.

MS. NEWBURY:

Q. I'm just going to refer to your evidence yesterday when you stated that you can run a 20-year trend, if the data is large enough and stable enough, but that's not the case with the data here in Newfoundland, and you don't run 20 years because you don't have that large, stable database?

MS. ELLIOTT:

A. I'm sorry, I -

MS. NEWBURY:

Q. I can refer to the exhibit if you wish. I'm not sure if the exhibit is available to refer to. This is the exhibit from--or not the exhibit, the transcript from yesterday, is that available?

MS. GLYNN:

Q. We do have it electronically, we don't have paper copies.

MS. NEWBURY:

Q. Okay. Page 77 and starting at line 16, I believe. I'll just give you a moment to read the questions starting P.77, line 16, and your answer to that question. Perhaps we can

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scroll down a bit to show the rest of that answer. Have you had your chance to read that, Ms. Elliott?

MS. ELLIOTT:

A. Yes.

MS. NEWBURY:

Q. Okay, thanks, and now in this, I understand it that you're saying that you could run a 20-year trend if you thought that your data was large enough and stable enough, but that's not the situation here in this province, but generally speaking your thought is that large data can be used or a longer period of data can be used. Now I just want to refer to Page 4 of your report, the CAOWOO1 report on Page 4. In the first paragraph there, you note that "while the five-year period is a reasonable time period for determining the underlying trend rates for the property damage, collision and comprehensive coverages." In the paragraph below, you say that "due to volatility of the data and the limited number of claims, in this review we also considered the indicated lost cost trend rate over the 10-year period ending December

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31st, 2012, and selecting lost trend rates for the property damage, collision and comprehensive coverages." So while I understand your typical approach is to look at five-year periods for property damage, collision and coverage, it was the volatility of the data and the limited number of claims that prompted you to expand your time period to ten years. Now why would you not take the same approach that for bodily injury, if you're looking at a ten-year period of time? You still have volatility in the data, you still have limited claims. Why not expand the period of time to 20 years or 15 years?

MS. ELLIOTT:

A. You know, there are judgements, as we expressed, there are judgements that actuaries make in choosing to select the time period that they're going to use, what exclusions, they have to consider the uncertainty of the data. So in this case we wanted to look at what happens over ten years. It's a very small volume of data, so we chose to look at ten years. There is a point in time where you begin to question what am I measuring back from 1993 to 1998--that's sort of the first of the five of the 20 years that is presented by FA. You know, I'm sure I said yesterday there's no harm in looking at it, that's fine, but when you go back to 1993 and 1998 and you have to ask yourself is what's happening there relevant to 2015--like where do you draw the line? We could go back 25 years, and is that really relevant? And so the actuary has to make some judgement where you draw the line of what you're going to include in your loss trend model, and if we had 20 years of really solid, stable data, yeah, you could run that and you could run five years and say, gee, I get the same answer, you know, I'm getting a really good fit. That's not the case here, and I had presented--we went through with the yellow highlights yesterday how it went up and down and up an down, and having more of that noisy data, volatile data, am I really going to get an answer over 20 years? I'm not certain of that. I'm not certain you get a better answer using more data that's highly uncertain. And even last year FA said they can't determine a loss trend rate for

severity. This data is so volatile, so unstable, we can't do it. So they could have--they had 20 years, they could have had more years, and their choice was to say, you know, uncle, I give up, I can't get one model that I'm happy with, and we agree. I mean, that's why we take an averaging approach, because we know--we exclude one data point, a little bit shorter this or that, we get a different number. So you can choose to use 20 years, but I don't think in this case you're getting a better answer.

MS. NEWBURY:

Q. But your statistics could determine that. I mean, you could look at the 20 years and do what FA has done, which is identify different trends in that period of time.

MS. ELLIOTT:

A. You can look at statistics all you like. I'm an actuary, I look at statistics and they have value, but you have to look at it: are they reasonable? And a really good case in point is you look at the P-test and the T-test for the reform factor that FA has presented--we're not going to pull those up on the screen and

look at them, but FA is saying that these P-tests and T-tests are statistically, you know, significant. And so therefore FA is saying that the P-tests and the T-tests are strong, and that the reforms caused accident benefits cost to reduce by 73 percent and you know--the P-test and the T-test are right, they're significant, and I'm going to accept that, and I don't agree with that approach. I look at it and say does this make intuitive sense? Is it reasonable? Can I really tell to a consumer that your costs reduced by 73 percent of the reforms in AB? And they're going to say to me, well, did you reduce my premium by 73 percent because the cost went down? Well, the answer is no. Nobody came in--no rate filer came in with a reduction in cost for AB, anywhere near that or at all. Nobody came in with a reduction for BI of 37 percent. Nobody for private passenger, commercial, nobody, but FA is saying that the P-tests and T-tests are strong and reliable, and that's what the data says. I disagree with that approach. It's flawed. It's not intuitively reasonable that this occurred. So you can look at any P-test

and T-test you want and say it's significant and it's perfect, but does it make any sense? And I think you have to look at it and ask yourself does it make sense, and I say it doesn't.

MS. NEWBURY:

Q. Ms. Elliott, on that point, you were involved, were you, in the--any reports given to the Board or any expertise regarding the reform in 2004, either before or after the reform was introduced?

MS. ELLIOTT:

A. I was.

MS. NEWBURY:

Q. Okay, and was it your understanding that one of the objectives of the reform was to reduce lost costs, which would result in a reduction of premiums?

MS. ELLIOTT:

A. Yes. That was the plan, yes.

MS. NEWBURY:

Q. Okay. So that was the plan, and in light of your conclusion--your own conclusion that the 2004 auto reforms had no impact on the trend for lost costs, then would this suggest that the auto reform was a failure, at least as it relates to the goal of reducing lost costs?

MS. ELLIOTT:

A. I don't think I'm in a position to describe the reforms in any which way. The reforms are what they are.

MS. NEWBURY:

Q. Why can't you describe that? I mean, you're--from an actuarial point of view?

MS. ELLIOTT:

A. Because there's other things beyond just what the numbers say to say that they're a failure. I don't know how it impacted other parties and other affected industries with it. Perhaps they were a success because--you know, because of the change to that. So to describe something like a piece of legislation as a failure, that's not my area of expertise. So I won't comment on your opinion that it was a failure.

MS. NEWBURY:

Q. That's not my opinion. It was a question.

MS. ELLIOTT:

A. Well, it's not my opinion, either.

MS. NEWBURY:

Q. Okay, but my question was did it fail to achieve the objective of reducing lost costs?

MS. ELLIOTT:

A. We had estimated, and I do not have that at my fingertips but--that there would be a small savings for these reforms. They were different than the reforms in Nova Scotia and New Brunswick, where a very substantial savings was introduced because they had a cap on the pain and suffering award. In this province, with the $2,500 deductible, the expectation was that the severity would change slightly, that it would go down because of that deductible. That's not evident in the private passenger data at all. We're not seeing that. You know, in any of the tests that have been run, it is not there. That's unfortunate, and certainly it would be my opinion that if nobody can see it in the private passenger data, then it certainly--the savings isn't going to be in commercial data. What's being provided with significant P-tests and T-tests that there's this big savings in commercial of 37 percent on BI and 73 percent on AB, there's a flaw in the model. So it's

not really a matter for me to have an opinion on whether the legislation was a success or now. You know, that's a separate issue.

MS. NEWBURY:

Q. But your point just a moment ago is that you can't just look at the P-values and the T-statistics, and you're saying you have to look at it and is it reasonable to expect that there would be a reduction in the lost costs? And I'm thinking that's exactly what the expectation would be. That would be the whole--or one of the points of the auto reform is to reduce lost costs.

MS. ELLIOTT:

A. Um-hm, and I'm telling you with private passenger auto experience, the severity, the P-tests and T-tests show you that there was no impact, and so you have to say with a larger body of data in Newfoundland, the same cars on the same roads in Newfoundland, and there's no savings on the private passenger data which is more stable, not as volatile as the commercial data, we're not seeing it there. Then you look at a small volume of commercial data, which is very volatile, and here is says

there's a 37 percent savings. That just doesn't make any intuitive sense at all.

MS. NEWBURY:

Q. Well, it would make intuitive sense if you're expecting there to be a reduction in the lost costs. I mean, the fact that the test wouldn't -

MS. ELLIOTT:

A. We certainly are not expecting 37 percent reduction in BI,nobody is expecting that, and nobody is expecting 73 percent reduction in AB, nobody.

MS. NEWBURY:

Q. And what about the reduction in frequency? I mean, there's two issues here.

MS. ELLIOTT:

A. No. Certainly our opinion is that the decline in frequency happened well before the reforms, and anybody that's plugging in a reform parameter into the frequency--because it was a deductible change, that you're going to get $2,500 less, and the anecdotal sort of comments that you hear is that people probably inflated their claims to offset some of this $2,500 deductible, and so we're not seeing the savings. We don't have any evidence of that, but that's kind of the common thinking. And so it wasn't that they said, oh, I was going to go to court because I've lost wages and everything else, and now I'm not going to go because I get $2,500 less on my deductible, I'm going to sort of embellish my pain and suffering to try to offset that $2,500 deductible, but I'm still going forward to get my wage loss. I'm not not going forward with my claim because of this deductible imposed on your pain and suffering award. You're going to court to get your wage losses, you're going to court to get extra money to pay for chiropractors and massage therapists and other medical benefits or attendant care; it's not about the deductible that's stopping you going forward.

MS. NEWBURY:

Q. Well, what about the claims that are valued less than $2,500? Were there not a number of claims that fell into that category which, if eliminated, would reduce the frequency?

MS. ELLIOTT:

A. Right. It's very rare in my working knowledge

that someone goes to court to get a pain and suffering award of--say it was $3,000 and there was nothing else attached with it. They normally go in and they're saying I've lost wages, I had to go to the chiropractor, I had to hire someone to help me clean the house and cut the grass because someone else hit me, and so I need to be compensated for that, and at the same time, I should be given some pain and suffering. And so maybe my pain and suffering before was only worth $3,000 and they're going to try to get a little bit more, but that doesn't stop them going forward with their claim to get compensated for their wage losses and other heads of damages that they require.

MS. NEWBURY:

Q. Ms. Elliott, did you identify a percentage or an expected proportion of claims that would have actually fallen under that deductible amount of $2,500?

MS. ELLIOTT:

A. My understanding was the closed claims study would have had some of that information, yes.

MS. NEWBURY:

Q. Ms. Elliott, it's my understanding that it was

a 15 percent amount, and I'm going to request that you undertake to review the report that you produced at that time to verify what that amount was that fell under that $2,500 deductible level. (REQUEST)

MS. ELLIOTT:

A. I will try to do so, yes.

MS. NEWBURY:

Q. Okay, thank you. Just a question or two on the loss development factors. There was some discussion of that yesterday morning in your evidence, but I want to refer to you May 16th report at Page 11.

MS. GLYNN:

Q. That's Facility's report, this is--you want Oliver Wyman's May 16th report?

MS. NEWBURY:

Q. Yes.

MS. GLYNN:

Q. Is that the right page?

MS. NEWBURY:

Q. I'm not sure, bear with me for a moment. Yes, that's correct, so it actually starts on the bullet on the previous page, Page 10. If we can just scroll there to get the full context.

So it states here "both FA and Oliver Wyman independently select the claim count and loss development factors that apply to the industry CV experience data as of December 31st, 2012, but the factors selected by FA differ from those selected by Oliver Wyman. However, with the exception of AB, accident benefits, discussed below, we find FA's selected development factors to be reasonable." So is that still your position, that the selected development factors, with the exception of AB, are indeed reasonable?

MS. ELLIOTT:

A. We looked at the loss development factors that FA selected, and in looking at them and the averages that were provided, when we looked at them, we couldn't quite follow what they were--like, how did they pick those? They weren't too far off what was provided at the very--you know, they have a bunch of different averages, all-year weighted average, geometric average, but it didn't match up, and as I showed yesterday, it appears that FA selected the GISA factors that are based on losses and allocated loss adjustment expenses, although

FA states that it selects them on just the losses. So there's a misstatement there. And so although the actual values aren't wildly off, and so, you know, we looked at it and said, okay, I don't quite follow, but they're not--it's not like the AB where they have 1.14 and all the averages are less than 1. But when we looked at it and said, gee, you know, they--this doesn't appear to be appropriate to us that they select factors that are based on losses and ALAE versus losses, and so you're probably sitting--everyone's wondering, well, what does that really mean in terms of a loss trend. What it means is that if FA had selected the loss development factors based on losses only, as they said they would have or were doing, and use the same approach as GISA did but just use the losses only data, their 4.4 loss cost trend rate would decrease by about a point, and so--that would bring that 4.4 percent down to 3.5 percent. And so you're probably saying, well, why is there this disconnect between FA having 4.4 percent and Oliver Wyman is saying 1.5 percent, and we've talked about the ALAE and we've talked

about the timeframe that's selected. And as we've just discussed about the reform factors, FA's model is premised on assuming that the reform factors reduced the cost significantly and that there was a change in the trend rate starting in 2004-2. My position is -

MS. NEWBURY:

Q. Ms. Elliott, sorry -

MS. ELLIOTT:

A. I'm trying to explain to the about the ALAE and the impact. My position is that if the -

MS. NEWBURY:

Q. Ms. Elliott, my question was about the reasonableness of the loss development factors. Have you changed your opinion about whether or not they're reasonable?

MS. ELLIOTT:

A. I'm trying to explain that.

MS. NEWBURY:

Q. But I'm not getting the answer, you're -

MS. ELLIOTT:

A. Okay. I'll get there. So if FA had used the loss development factors that were based on the losses only data, their loss trend rate would decrease by almost a point, and so when

you're trying to understand why do we have this difference between the 4.4 and the -1.5 between Oliver Wyman and FA, there's the loss development factors. And if FA was to use those loss development factors based on losses only and if they were to not think that the reforms reduced costs by 37 percent, and took a ten-year average, using those adjusted ALAE that they should have used, excluded two high and two low points, their loss trend rate as at December using the data through to December 2012 or the data through to June 2012 would fall between -1.7 percent and -1.2 percent. So when we look at these ALAE factors and say are they reasonable or not, it's all part of the package of why we have differences between FA and Oliver Wyman. So the issue--I did not say that the factors were unreasonable. I've just said that it doesn't appear appropriate to base loss development factors on something different than what you stated that you were basing them on.

MS. NEWBURY:

Q. Okay. So Ms. Elliott, you didn't state that they're unreasonable, and in your report you

have stated clearly that the selected loss development factors are reasonable other than with AB. So I put it to you that they are reasonable. You may not understand how they got to--how they derived that. We've made assumptions.

MS. ELLIOTT:

A. I think we do understand, and we showed yesterday, that they selected the identical factors to GISA and the GISA data is based on losses and ALAE, and FA stated that they were selecting their factors based on losses only, which--it would appear that they did not do that, and as a result of that, their loss trend rate is nearly a percentage point higher. So when you look at the individual factors in and of themselves, they're not--you know, they look in line with our averages, but really not what FA said they were doing.

MS. NEWBURY:

Q. But that is your inference. That wasn't put to Mr. Doherty in any written questions, nor was it put to him in examination, cross-examination, of him. So that's your inference.

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MS. ELLIOTT:
A. Yes. We looked at each row, each column of factors, and they matched up.
MS. NEWBURY:
Q. And are you suggesting that if you looked at indemnity only, that you would have a difference in the factors?
MS. ELLIOTT:
A. Yes. When you look at--they were provided by FA, the factors for indemnity only, and they are generally lower than the GISA factors.
MS. NEWBURY:
Q. But wouldn't you have a different trend if you look at indemnity alone, which is what Facility has done?
MS. ELLIOTT:
A. And that's my point, that if FA had used the indemnity-only factors and did the exact model that they ran with starting with 2004-2, their trend rate would decline from 4.4 down nearly one point--percentage point down to 3.5 percent.
MS. NEWBURY:
Q. But I understand in your report, you've actually stated there is no difference if you

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do indemnity or indemnity plus the expenses.
MS. ELLIOTT:
A. Oh, I think you are not understanding my point. My point is that if FA had used the loss development factors, based on losses only, and ran their model the same way, their trend rate would decline nearly a percentage point.
MS. NEWBURY:
Q. So if that's the case, why would you not have raised this in your report in any of your questions?
MS. ELLIOTT:
A. I'm trying to explain. You asked me about the reasonableness of the factors, and I'm trying to explain the impact of those factors.
MS. NEWBURY:
Q. Yes, but you didn't explain that in your report.
MS. ELLIOTT:
A. No. We didn't find their loss trend rates--we're taking issue with their loss trend rates. The bottom line was that the loss trend rates that they have put forth, the 4.4 percent, we didn't agree with and we still

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don't agree with. One of the reasons is the loss development factors, that's a driver of the difference. We're trying to understand why does FA have 4.4 and why does Oliver Wyman have -1.5, and that's part of the reason.
MS. NEWBURY:
Q. But this is not something you identified in your report of May 16th, 2014?
MS. ELLIOTT:
A. No. I expressed it in my direct, that there was a difference, and I'm sharing more information today.
MS. NEWBURY:
Q. Now you have in your report, your trend report CA OW OO1, you have a reference to a ULAE adjustment factor and I don't think it's described in your report. Can you point to anywhere in your report where you describe what that ULAE adjustment factor is?
MS. ELLIOTT:
A. ULAE is the un-allocated loss adjustment expense. There's an estimate that's provided for the industry, the data is collected for all insurers and it's provided by GISA and that factor is used widely, it's a calculated

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factor of what it is for each accident year.
MS. NEWBURY:
Q. It's an allocated factor, and you say it's -
MS. ELLIOTT:
A. It's called an unallocated loss adjustment expense, so it's the cost of insurers, their claims department, you know.
MS. NEWBURY:
Q. And you said it's based on accident year?
MS. ELLIOTT:
A. Yes. GISA would provide a factor for each accident year, so it varies by accident year.
MS. NEWBURY:
Q. And so it's not your view that it's based on calendar year?
MS. ELLIOTT:
A. Not my view? Well, the information is provided by GISA that is applied to each accident year. GISA provides that data that you can apply to each accident year.
MS. NEWBURY:
Q. And what is an accident year?
MS. ELLIOTT:
A. An accident year are the costs of claim--is the claims that occur in that calendar year.

MS. NEWBURY:
Q. And so you're saying that GISA provides that data based on the accident year and not the calendar year?
MS. ELLIOTT:
A. I'm saying that GISA provides a factor that is to be applied to each accident year.
MS. NEWBURY:
Q. It's noted that the Facility has provided in their application the position that since guideline factors included the loss adjustment expenses, both the allocated and unallocated, but that industry trends and loss adjustment factors don't apply, because of the manner in which the expenses are charged for Facility by the servicing carriers--given the apparent influence exerted by trends in the ULAE, wouldn't it seem reasonable that FA's trend selection based on indemnity only should apply, and not the indemnity plus expenses?
MS. ELLIOTT:
A. I believe I said that they impact reviewing whether the loss experience is just the indemnity portion only or the indemnity plus all the loss adjustment expenses. The

difference is not very large; quite small. We looked at some of the time periods where there was no loss development, all the claims were pretty much closed and settled, so that wasn't an issue, and we weren't finding much difference in the trend rate. They're not--of course, not going to be identical because the data is different and if you look--you know, the same story if you looked at different time periods, you get different differences, but the difference in the trend rate is not the issue in this discussion. It's part of the difference, a small part of the difference, but it's not a large impact.
MS. NEWBURY:
Q. But would it be reasonable? My question was wouldn't it be reasonable for FA to base its trend selections on indemnity only? There is some influence.
MS. ELLIOTT:
A. Yes. We don't object to FA basing its trend rates on indemnity only, that's not--we don't object to that. We think that's fine, and in fact, if the indemnity costs were changing at a lower rate, then the--or a different rate,

then the claims handling costs, you know, that would affect the trend rate for sure, but we're assuming that that's not the case, but we don't have an objection to FA basing its trend rates only on the indemnity. We don't object to that.
MS. NEWBURY:
Q. I request that you turn to Page 13 of that report, CAOWOO1, and perhaps we can make that a little larger, the columns at the top of the--page 13. So there's a column here--actually, can we go back to Page 13? Okay. So there's a column with the heading ULAE Adjustment, and if you look at the years, say, 2006 up through 2009, 2010--actually, the first half of 2010, you're generally in the range of 1.07 and then it drops down, in the more recent years, to 1.052.
MS. ELLIOTT:
A. Um-hm.
MS. NEWBURY:
Q. And would you not consider this to be a significant difference in the ULAE adjustment?
MS. ELLIOTT:
A. Well, I think you have to understand that the-

-the losses include the ALAE already. So if a company decides that I'm going to use more outside adjusters--so the loss adjustment expenses is a combination of allocated loss adjustment expenses and unallocated loss adjustment expenses, so in running your operation, the insurance company may decide that it wants to use more outside adjusters, and as such, their allocated costs would increase and their unallocated costs, all else being equal, would decrease. So maybe you decide, you know, I'm not going to use an in-house staff, I'm going to hire outside for all my resourcing, for settling claims, and when that happens, the ULAE will go down but the ALAE will go up. So if you do a regression analysis, it's my view that you should always either do indemnity only, as FA has done, and we don't object to that, or you do losses and all the claims handling costs together. So just because you have something with the ULAE declining, buried in there the allocated may be going up, but that is not identified here.
MS. NEWBURY:
Q. So you do note, then, that it is a significant

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drop. You're just saying that it could be explained on the other heading or the other side, the allocated losses.
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. And it's still your view that these loss adjustments are based on accident year versus calendar year, and it's my understanding that it's based on calendar year, so I'm going to request that you undertake to confirm that with GISA. (REQUEST)
MS. ELLIOTT:
A. Okay.
MS. NEWBURY:
Q. I know we touched on this a little earlier, but I want to go back to Page 3 of this report, on the issue of the lost costs versus the severity and frequency, and this is under the heading Considerations of Severity, Frequency and Lost Cost Trend Patterns. And I'll repeat this again, but you were referred to this earlier, "review of the severity and frequency trend patterns over the recent past suggests that we may not fully reflect the

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correlation that seemingly exists between severity and frequency, if we separately select severity and frequency trend rates over different time periods. For this reason, we tend to select past and future trend rates by directly examining the trend patterns for lost cost. What is the correlation that you've identified there?
MS. ELLIOTT:
A. I think I had an example earlier, that if we see there's a bump in frequency, which is often due to weather-related incidents--so you know, the roads are icy and slippery and you have more claims, and they tend to be the smaller bumper claims, you can't--there's ice, you have a stop sign, you bump into the car in front of you. So those claims tend to be the smaller claim. So often we see when there's a bump in frequency, there can be a decline, a little decline in the severity, and so there's that matching--you know, it kind of makes sense and of course, you need a larger body of data to really, you know, see that. So if we decided to use a time period where that sort of--maybe there was that bump in frequency, we

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excluded that, but we included the--in our time period for severity, we included it. So the severity went down, but we didn't include the bump up in frequency, we're kind of getting a mismatch. So when we do the regression analysis, we think it's appropriate to use the same time period for frequency and severity so we don't miss that subtle possibility that anything that's affecting frequency and sort of offset in severity, that we miss it.
MS. NEWBURY:
Q. Okay, but you can actually look at these things separately, severity and frequency, and looking at the same time period?
MS. ELLIOTT:
A. And we do.
MS. NEWBURY:
Q. Okay, and so this is an inference on your part, then? You don't actually know that there's a correlation of the nature that you suggested?
MS. ELLIOTT:
A. Oh, we have seen it.
MS. NEWBURY:

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Q. Have you seen it in this particular data? Have you actually looked--gone beyond the numbers and looked at -
MS. ELLIOTT:
A. No, no. I mean, and the problem here is the numbers. I mean, that's--you've hit the nail on the head. The problem is, in the bodily injury here that we're focused on, there's only about 120 claims a year. It's very difficult. This data has, you know, the noise, as you referred to it, and it's very hard to see that, but we know that phenomena does exist. We've seen it in other provinces and other coverages, so it's, you know, one of the things that we don't want to overlook.
MS. NEWBURY:
Q. So it's a correlation. You've given one example, you've referred to it twice now, about weather and you might have a lot more accidents of a less-significant nature. Have you verified statistically what the correlation is, and is there more than one correlation?
MS. ELLIOTT:
A. Well, I think what we're saying is we like to

match up the time periods so that we don't
inadvertently miss an correlation. That's
what we're expressing here, that I don't want
to take a frequency trend rate over five years
and a severity trend rate over 20 years. We
might get a mismatch there. That's the point
that we're trying to make here.

MS. NEWBURY:

Q. Okay, and perhaps that point wasn't actually
clear, because I don't see any references
there to time periods and being concerned
about looking at it separately with separate
time periods. There's no reference there at
all that I can see to time periods.

MS. ELLIOTT:

A. Okay. Well, that was the intention. I will
take your note to maybe perhaps write it more
clearly.

MS. NEWBURY:

Q. There's also a mention there of recent past.
So it looks like you've come to a conclusion
that there's a correlation, you haven't--you
know, you've noted what it could be or what
you think it is, but what is the recent past
that you're referring to?

MS. ELLIOTT:

A. Well, I would have to acknowledge that when we
do the report, that this paragraph might be--
I'm pretty sure is repeated over, unless we've
changed something, so--and we take this view
in other provinces. We definitely have seen
it. I mean, this is not--you can understand
that there can be a bump in your frequency
rate due to weather and smaller claims. So
we're just trying to make the point here so
that we have a--we don't have a mismatch in
the timing, that we look at the same time
period for frequency and severity and of
course, therefore, lost cost in our review.

MS. NEWBURY:

Q. So the recent past, then, you can't identify
five years?

MS. ELLIOTT:

A. No.

MS. NEWBURY:

Q. Was it either the past five years or the past
12 years or -

MS. ELLIOTT:

A. I cannot for you.

MS. NEWBURY:

Q. Okay. So is this boilerplate language that
you would put in your reports?

MS. ELLIOTT:

A. Yes. I just expressed that. This is our
approach that we take, we take it in every
province, every review that we do. We don't
want to find that we're mismatching frequency
and severity, so we do that in all our
reviews, that's correct.

MS. NEWBURY:

Q. And you've also stated here that you tend to
select past and future trend rates by directly
examining the trend patterns for lost costs.
What exceptions to this tendency have you made
for this review, if any?

MS. ELLIOTT:

A. In this review, I don't believe there are any
exceptions to looking at frequency, severity,
lost costs over the same time period, no.

MS. NEWBURY:

Q. Okay. I'm going to refer to Exhibit PE#3.
Actually, that's not the right exhibit. I'll
come back to that question later, Ms. Elliott.
I'm going to refer to page 5 of your report CA
OW 001, trend report. And under the heading

"seasonality", now I note there it says we
refer to the first half of accident year XXXX.
Now, I thought somewhere you had a report
where that actually was filled in. Can you
recall what the accident year--sorry, this is
a different question. Okay, under this
heading, you discuss frequency and severity,
but your analysis ultimately was based on loss
cost based on our previous discussion, is that
correct? Your final analysis, you've gone
with a loss cost because you want to take into
account the correlation between the two?

MS. ELLIOTT:

A. I think if you--because I've tried to express
when we review loss cost trend rates, we look
at loss cost frequency and severity all at the
same time. Our output, our data shows on one
page the loss cost frequency and severity and
so we look at it all together. And our point
was that the two multiply together. If you
use the same time period and do exactly the
same thing, the result that you get for
frequency times the result that you get for
severity equals the loss cost result. It's
the mathematics of it. So, that's what we're

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doing.
MS. NEWBURY:
Q. You note here in this heading that we find that seasonality is sometimes evident and we take this into consideration in our review of the bodily injury trend rate patterns.
MS. ELLIOTT:
A. Um-hm.
MS. NEWBURY:
Q. And just can you explain what that means?
MS. ELLIOTT:
A. Yes, you know, again, this data is limited and small and so sometimes we think, depending upon--as I said before, we run lots of different versions of this analysis and sometimes depending upon the time period that we pick, the T test that says it's significant for seasonality is strong and other times it's not. And that was the point that we're trying to make there, that look at it and it's not consistent, it's not consistently strong, the seasonality for bodily injury. And, you know, I can only assume it's because the data is so small that we can't see any consistency in that. That was the point that we were making.

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MS. NEWBURY:
Q. Now, if you turn to page 11 of your May 16, 2014 report and under the heading for "Bodily Injury", second bullet. So, the second bullet under "Bodily injury" heading it says, "we find there to be evidence of seasonality is the loss cost in the more recent years. The parameter test we apply referred to as a T test indicates that a seasonality parameter should be applied in the regression model over the 2005 to 2012 period". What regression model are you referring to here in this reference?
MS. ELLIOTT:
A. Most likely mine, but -
MS. NEWBURY:
Q. Did you do a 2005 to 2012 regression model?
MS. ELLIOTT:
A. Oh, sure, we did all sorts, as I said, I can't even begin to tell you how many we did.
MS. NEWBURY:
Q. But it's not one that you've produced?
MS. ELLIOTT:
A. You know, the model produces it for me. I don't print everything out. I'd have hundreds

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of pages.
MS. NEWBURY:
Q. No, but that you've produced for the Board?
MS. ELLIOTT:
A. Well, I produce them all and I provide a report to the Board of the summary of our selections; that's what we do.
MS. NEWBURY:
Q. I haven't seen in anything and I'm not sure, maybe we don't get the same documentation that's provided to the Board. I would have assumed that we did.
MS. ELLIOTT:
A. You do.
MS. NEWBURY:
Q. Okay, well, I can't see any regression model over the period 2005 - 2012. So, I'm wondering why if you have seasonality in a particular regression model, why don't we have that regression model?
MS. ELLIOTT:
A. Well, you don't have all the ones that I ran. I think I've expressed that we run numerous models and we don't print them all out. So, my point here was that what we said was

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seasonality, depending upon the time period that you select and the data spin (phonetic), it can show that it's significant. FA use the time period 2004-2 to 2012 and didn't find seasonality significant. When we looked at our model over that time period which matched up with what FA is effectively using, we were seeing it. But, you know, it's a slippery thing, this seasonality and this skinny data that we have. Sometimes it's significant, seasonality, and sometimes it's not. There's only 120 claims, there's not a lot of data here. That is the point. FA found that it wasn't significant and, you know, it's not a material issue, but we made note of it and depending upon the time period that you use, it can be significant.
MS. NEWBURY:
Q. But Ms. Elliott, the 2005 - 2012 period when I asked you about that first, you said it would have been your model. Now, you're thinking it's the FA regression model, the time period that they selected, but they didn't select 2005 - 2012 either.
MS. ELLIOTT:

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A. No, they selected 2204-2 to 2012 for the selected loss cost trend rate that they used.

MS. NEWBURY:

Q. And this is a different time period?

MS. ELLIOTT:

A. It's a half a year less, that's right.

MS. NEWBURY:

Q. But half a year can make a big difference based on some of the analysis that you've provided.

MS. ELLIOTT:

A. Yes, that's correct.

MS. NEWBURY:

Q. And but you haven't done a 2005 - 2012 period yourself?

MS. ELLIOTT:

A. No, I just said that we did. I mean, I wouldn't -

MS. NEWBURY:

Q. But not to produce for the Board?

MS. ELLIOTT:

A. If the Board would like me to produce it, if someone would ask me for that, I can provide that.

MS. NEWBURY:

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Q. I assume that, you know, when you go through and you do different models and you pick different times periods, that ultimately you say, well, I'm not going to use all of them. I prefer this model over another model. Am I correct that you pick the best models and produce those for the Board, and if you didn't produce it, then for some reason it wasn't the best model to use?

MS. ELLIOTT:

A. Well, I'm not sure what you mean by "best". We look at the data to try to understand the patterns in the data, the patterns of how those costs are changing over time. We look at different time periods, with and without exclusions. We look at whether seasonality is a factor. We look at whether the reform is a factor. As I said, we have a flexible model that we can look at many runs. And the model is really nice and simple to use. I just click the fit button and put in some X's of what I want to see or not see and it does it in a second. So, we're able to look at numerous runs in a very short period of time and assess our understanding of the data, what

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are the patterns. That's what we do and as I expressed, seasonality may be a factor here for commercial data. The data is so thin it's hard to really tell for sure. We saw over some time periods it was and some time periods it wasn't, and we made that comment, that's all.

MS. NEWBURY:

Q. But, Ms. Elliott, it is a model that you haven't relied upon and you haven't produced for the Board, so otherwise this model wasn't your selected or preferable, I use the word "best", but maybe preferable model, from your perspective. So, why would you pick a different model to point out that you can run enough tests and find seasonality in some of them, when it's not actually a model that either you used or that the Facility used?

MS. ELLIOTT:

A. I think we were trying to point out that seasonality is a parameter that is not--it maybe an impact or it may not be an impact. It may add to you model, like it might be an element that you should consider in your model, but interestingly it depends upon the

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time period that you use, which again jus speaks back to limited data.

MS. NEWBURY:

Q. And I would put to you that the Facility did, in fact, consider that; they didn't just ignore it. They considered it and decided that it was not in evidence there to support that it should be included as a parameter. And you could only find it when you used actually a different model than either one of you. So, yes, it could happen and perhaps if you pick enough time periods you might find it in some of those models, but if you're otherwise rejecting that model or choosing not to rely upon it, then what's the value of pointing out that you can find seasonality during some timeframes and not in others?

MS. ELLIOTT:

A. It's a small value; it's a comment that we made.

CHAIRMAN:

Q. I think we'll--are you finished with that line, that -

MS. NEWBURY:

Q. Yes.

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CHAIRMAN:
Q. Okay, well, we'll break now for half an hour.
(RECESS)
CHAIRMAN:
Q. Once more unto the breach.
MS. PAULA ELLIOTT (PREVIOUSLY SWORN) CROSS-EXAMINATION BY MS. JENNIFER NEWBURY CONT'D
MS. NEWBURY:
Q. Thank you. Ms. Elliott, just a general question now about your governance structure that you use at Oliver Wyman when you're changing your process. In particular the percentage change to dollar value, when you changed it from the dollar value to percentage change, and then you changed it back, do you have a governance structure in place that would define how you move from one approach to another?
MS. ELLIOTT:
A. Well our policy is that for all our work, all our reports that are provided to clients, any work product that's provided to a client, is subject to peer review. So my colleague, Ted Zubulake who works or who heads our northeastern region, he resides in New York,

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he would have peer-reviewed and participated in the preparation of this report, and any changes in approach, yes.
MS. NEWBURY:
Q. And when you changed it back, would he also have been involved in the peer review process?
MS. ELLIOTT:
A. He was involved in every loss trend report that was prepared for the Province of Newfoundland.
MS. NEWBURY:
Q. And was there any testing of the approach? When you decided to change from one to the other, did you take a broader analysis and say, "We're going to see now whether this is going to be a suitable approach," or did you just make a change and -
MS. ELLIOTT:
A. It would have been discussed at the time in making that decision. So as you know that's going back a little bit of time for me, so I don't remember the exact discussion, but it definitely would have been discussed and between my colleague, Ted Zubulake, and myself. It was not something I did on my own,

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that's for sure.
MS. NEWBURY:
Q. And there was no specific testing of though that you refer to?
MS. ELLIOTT:
A. No, no. We, both Mr. Zubulake and myself, would have the same loss trend model and data. He'd be to test, look at it, decide whether he believed it was a reasonable change to make. So it was not something that I did alone. It would have in consultation with my colleague.
MS. NEWBURY:
Q. But were there any specific tests performed by either one of you to your knowledge?
MS. ELLIOTT:
A. Well we would have tested what impact that is on the loss trend rate. We would have looked--and I said, we run numerous examples, and my colleague will often say to me, "Gee, you know what about this? Why don't we do that?" So it would have been looked at what is the impact if we do that versus not doing that, definitely.
MS. NEWBURY:
Q. Ms. Elliott, I've tried to elicit from you

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information before about the P values and the meaning of R values. I'm going to refer you again to SD 1 through SD 4. I've got a request that you identify. Let's look at SD 1 first. Just a moment for this to come up on the screen. So page 2 of that document. Okay. Can you identify the value associated with the T statistic for this exhibit?
MS. ELLIOTT:
A. Yes, it's 1.704 for the intercept, and the all years is minus 1.466.
MS. NEWBURY:
Q. Okay, and what is the P value?
MS. ELLIOTT:
A. Eleven percent for the intercept and 16.5 for the all years.
MS. NEWBURY:
Q. Okay, and what are the degrees of freedom?
MS. ELLIOTT:
A. Well, let's see if I can explain it. You know, I didn't prepare this report. I'm trying to find it.
MS. NEWBURY:
Q. Okay.
MS. ELLIOTT:

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A. I'm pretty -
MS. NEWBURY:
Q. So the top right-hand corner under Selected Trends Structure.
MS. ELLIOTT:
A. Okay. The degrees of freedom are 15.
MS. NEWBURY:
Q. How are the degrees of freedom calculated?
MS. ELLIOTT:
A. It's a measure of how many data points are in the model, and then it takes into account any parameters that are also used within the model. So the more data that you have, and the fewer parameters that are in your model, the larger that the degrees of freedom will be.
MS. NEWBURY:
Q. Okay. And how do you come up with the critical value for this particular regression? I mean what--how do you determine what is acceptable for this particular set of values? You've got your T statistic, you have your degrees of freedom.
MS. ELLIOTT:
A. Um-hm.

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MS. NEWBURY:
Q. You have your P value.
MS. ELLIOTT:
A. Um-hm. Well, as I expressed, we look at the regression statistics that are provided, and in particular this is a good example. As I showed earlier we'll look at the regression statistics for the frequency, we'll look at the regression statistics for the severity, and they will be very different. And in this case, as I expressed earlier, the loss cost statistics will be different. So both--even though you're running a regression model that's based on the frequency, the severity and the loss cost, and those loss trends combine together for frequency and severity to be the loss cost trend rate. The regression statistics for frequency are different than the severity, and are different than loss cost.
MS. NEWBURY:
Q. Right.
MS. ELLIOTT:
A. And the loss cost is based on the combination of the frequency and the severity.

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MS. NEWBURY:
Q. And in this case here, I would suggest that the statistics from this regression would typically be rejected by most actuaries and most statisticians?
MS. ELLIOTT:
A. If you were looking at the frequency and the severity statistics, the answer to that would be no.
MS. NEWBURY:
Q. But we're looking a the loss cost. You've decided to combine them.
MS. ELLIOTT:
A. No.
MS. NEWBURY:
Q. I mean that's your decision that you -
MS. ELLIOTT:
A. No, I -
MS. NEWBURY:
Q. - have focused on looking at them together.
MS. ELLIOTT:
A. No, I think you're misstating it. What we said is that we look at the loss cost, we look at the frequency, we look at the severity. If you have to trend rates that are going in

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different directions, so a negative frequency trend rate and a positive severity trend rate, your regression statistics for the loss cost can be quite poor, but at the same time, and I showed the exhibit earlier, the regression statistics for the frequency can be acceptable and for the severity acceptable, while the loss cost is not. That is why we always, always look at loss cost, frequency, and severity. To show this exhibit and say that this is all that we looked at is a misunderstanding of our work.
MS. NEWBURY:
Q. Ms. Elliott, what is the cut-off for the P value that would be considered an acceptable value for a regression?
MS. ELLIOTT:
A. Well, FA has used .05. I don't object to that. We tend to look at the T stat, and typically we're looking at a number at least--we'd like it to be close to two. But again, none of the regression statistics that are presented by anybody on this set of commercial data are good. They're not. There's limited data. It's impossible to be good. So there

not good. So even if you set a standard that is--that you think is reasonable, it doesn't necessarily mean that you're getting--that that is the right choice. I guess that's what I'm trying to say, because you might run a model and have statistics that you think are appropriate and then one year later do the same thing, and you get completely different results. And if you pick that number, maybe it's a high number, a low number, and then run your regression analysis doing the same thing the next year, it can be quite different. And this all comes back to the same thing; we're dealing with a small data sample here.

MS. NEWBURY:
Q. Okay.
MS. ELLIOTT:
A. A hundred and twenty or so claims per year.
MS. NEWBURY:
Q. Ms. Elliott, so the P value that you've indicated that Facility uses is five percent or .05, and you don't take objection to that. And this value here is 16.5 percent which is well above that P value?
MS. ELLIOTT:

A. Yes.
MS. NEWBURY:
Q. Do you agree?
MS. ELLIOTT:
A. Yes, I do.
MS. NEWBURY:
Q. And the next exhibit, SD 1--SD 2, what is your P value?
MS. ELLIOTT:
A. A hundred percent it shows there.
MS. NEWBURY:
Q. And what does that mean?
MS. ELLIOTT:
A. That it's not a reliable parameter that should be included in the model.
MS. NEWBURY:
Q. Okay. And this is your model of five years?
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. And five years ended which period?
MS. ELLIOTT:
A. I--sorry, I can't see the--yeah, I think December 2012.
MS. NEWBURY:

Q. Okay, and -
MS. ELLIOTT:
A. What it tells us is that there's no trend, that over time it's zero.
MS. NEWBURY:
Q. Right.
MS. ELLIOTT:
A. That there's -
MS. NEWBURY:
Q. There's no trend, that's correct.
MS. ELLIOTT:
A. There's no--you can't tell anything from the data. So -
MS. NEWBURY:
Q. And your degrees of freedom in this case, is that seven?
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. Okay, and that would be based on the fact that you have a certain number of data points, how many data you have?
MS. ELLIOTT:
A. That's based on the number of data points, less the parameter in the model.

MS. NEWBURY:
Q. Okay, so it's eight data points less -
MS. ELLIOTT:
A. The one parameter for time.
MS. NEWBURY:
Q. One parameter?
MS. ELLIOTT:
A. Um-hm.
MS. NEWBURY:
Q. So it gives you seven. And the next, SD 3, what is your P value?
MS. ELLIOTT:
A. Point one percent for the intercept and .2 percent for the all-year parameter.
MS. NEWBURY:
Q. Okay, and what does that mean?
MS. ELLIOTT:
A. That they're better than the 100 percent, that the results have, you know--are more--it tells you that it's stronger.
MS. NEWBURY:
Q. Okay, and the degrees -
MS. ELLIOTT:
A. A better test.
MS. NEWBURY:

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Q. And the degrees of freedom in this case?
MS. ELLIOTT:
A. Is 15.
MS. NEWBURY:
Q. Fifteen. And in SD Number 4, what is your P value?
MS. ELLIOTT:
A. A hundred percent.
MS. NEWBURY:
Q. Okay, and this again is a five-year model. And do you use the same stats for five-year models and ten-year models, or do you change the alpha? I've heard something about an alpha being used. Do you know what that is?
MS. ELLIOTT:
A. I don't know that the alpha is that you're referring to.
MS. NEWBURY:
Q. Okay. Okay.
MS. ELLIOTT:
A. No.
MS. NEWBURY:
Q. Do you know, is there any difference or do you have the same expectations when you move from a ten-year model to a five-year model for

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regression?
MS. ELLIOTT:
A. No, we would expect--whether you're looking at ten year or five year, you want to get a good fit for the data that you're looking at.
MS. NEWBURY:
Q. Yes.
MS. ELLIOTT:
A. Just because you have a shorter period doesn't mean that you would change your--what you think is a reasonable fit, yeah.
MS. NEWBURY:
Q. Okay. And in this case here you've got a P value again of 100 percent?
MS. ELLIOTT:
A. That's correct.
MS. NEWBURY:
Q. Which -
MS. ELLIOTT:
A. So we're saying that, right, that over the passage of time you can't measure a trend rate with this data. That's what that's saying.
MS. NEWBURY:
Q. But in your view it's--you've chosen to emphasize five-year periods of time because

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you feel it's more responsive? So notwithstanding what the stats say, you think that inputting the five-year regression models into your overall trend rate actually improves your results?
MS. ELLIOTT:
A. I think again I'm repeating myself, that when we look at the regression statistics, and when you have a frequency rate that's declining, and you have a severity rate that is increasing, you're not going to get reliable or usable statistics. You should be looking at your frequency regression statistics and your severity regression statistics which we do. And the loss cost is not going to give you something that is useful. I've expressed this. I've told you that we look at our frequency statistics, we look at our severity statistics. FA produced this exhibit; not us. FA said that they looked at this. You're asking me to comment on it, but it is not what I looked at when we reviewed our models.
MS. NEWBURY:
Q. Ms. Elliott, have you looked at the frequency and severity models for your five-year

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regressions and determined that those results, the statistic results, are acceptable?
MS. ELLIOTT:
A. No, the data is very--I mean, the data is very thin. We wanted to look at the five year to see what's happening in the last five years. That's what we've done. We don't incorporate any one model. We don't say, "If I take the five years, I get the right number. If I take the ten years, then I get the right number." We're trying to look at this in a consistent approach. The more recent data might tell us if there's a direction that's a little bit different than the ten-year period. We look at that information. None of the models, none of the models are great fits. None. Not those presented by FA or those presented by Oliver Wyman. They're all relatively weak.
MS. NEWBURY:
Q. Ms. Elliott, I'm going to refer you to Exhibit D1. This the Facility's Report.
MS. ELLIOTT:
A. Um-hm.
MS. NEWBURY:
Q. All right. And there's a section there called

"TPL Indivisible"?
MS. ELLIOTT:
A. Yes. Um-hm.
MS. NEWBURY:
Q. That's the second band of data.
MS. ELLIOTT:
A. Um-hm.
MS. NEWBURY:
Q. So the first one is total, but then under that it's TPL Indivisible.
MS. ELLIOTT:
A. Um-hm.
MS. NEWBURY:
Q. I'm going to refer you to the column that's entitled "Ultimate Loss Costs."
MS. ELLIOTT:
A. Um-hm.
MS. NEWBURY:
Q. Now if we look down for the ultimate loss costs for--yes, that's Column 8.
MS. ELLIOTT:
A. Um-hm.
MS. NEWBURY:
Q. And we start in 2004. We have ultimate loss costs of 1610?

MS. ELLIOTT:
A. Um-hm.
MS. NEWBURY:
Q. The next year, 1361, and then it goes up, 2224?
MS. ELLIOTT:
A. Um-hm.
MS. NEWBURY:
Q. Then it goes up to 2874; up to 2902; then it goes up to 3029; then it goes up to 3530; down slightly, 3412; down slightly, 3474. And so I'm trying to look at this and understand your evidence, and you have a downward trend rate?
MS. ELLIOTT:
A. Yeah.
MS. NEWBURY:
Q. Since 2004?
MS. ELLIOTT:
A. Yeah.
MS. NEWBURY:
Q. A continuing--year after year your trend rate is going down. And I'm looking at the ultimate loss costs here, and they seem to go up pretty well every single year. A couple of exceptions, but a layperson looking at this

says, "Well, that's certainly an upward trend. I'd rather be at the beginning years of those ultimate loss costs rather than the end years of those loss costs." How can you explain to the layperson who looks at this, you know, to see a trend and an eyeball will tell you that, you know, this is an upward trend?
MS. ELLIOTT:
A. Um-hm. Well, that's an interesting question. I have a couple of comments on that regard. The first thing is the trends that are applied to this data are based on commercial data which does not include taxis. We're looking at taxi data. This Column 8 is all the taxi loss experience. So the trend rates that are applied to it that we're measuring, and this is a very large piece of the uncertainty, we're using commercial data to estimate loss trend rates and that -
MS. NEWBURY:
Q. Ms. Elliott, sorry, you've previously indicated though that the use of the commercial data is reasonable?
MS. ELLIOTT:
A. I've said that there really isn't a better

choice.
MS. NEWBURY:
Q. Okay.
MS. ELLIOTT:
A. Yeah. So we're applying commercial trend rates to taxi experience, but you know--and the taxi experience is not credible. There are very few claims there, but interestingly, if you look at 2010, 11 and 12, and I am the first to admit, and repetitive as I am, this data is not credible, but anecdotally, we can see that there's a decline from 2010 to 2011. It went down 3.3 percent, and then it went back up slightly, just under 2 percent from 2011 to 2012. So in the last three years, kind of that average change if you will, minus one percent or it's flattening out. So perhaps the more recent information that we see, limited as it is, is that the costs are not continuing to increase as they have as-- you know, which is evident here with the taxi experience that it's flattening out. So this data is not reliable upon which to base a trend rate. FA has acknowledged that and they're using commercial experience to

calculate the trend rate. But looking at this estimate of the cost for taxis, and focusing in on the last three years, we see things that are flattening out and declining there. So it's very hard to really be convinced, you know, what is the right number? Is plus 4.4 percent from commercial experience that FA has presented -

MS. NEWBURY:

Q. But Ms. Elliott, your approach and your conclusion is that there has been a downward trend since 2004.

MS. ELLIOTT:

A. Um-hm.

MS. NEWBURY:

Q. You didn't talk about, oh, in the last couple of years maybe there's a flattening out. You've talked about a continual year-after-year downward trend since 2004.

MS. ELLIOTT:

A. Right.

MS. NEWBURY:

Q. And I can't see that in these numbers.

MS. ELLIOTT:

A. Well you're--we're talking about commercial

vehicle experience. Commercial vehicles do not include taxis. They're the trucks and the vans, the business cars, and business vehicles on the road. Completely separate that we're looking at, and that's very limited. You're presenting here the experience for taxis, and if you're asking me can we establish a trend rate for a TPL, I can only say that FA chose not to do so because it found the experience was too limited to set a trend rate. I'm only stating that in the more recent years it appears to be flattening out.

MS. NEWBURY:

Q. But your trend rate though that you have produced in since 2004, and it is a trend rate that you have suggested should be or is present and applicable to the taxi segment?

MS. ELLIOTT:

A. Right, we were trying to figure out how are these costs--what are they going to be in--for the policies that are going to be sold in 2015. And if I understand the question, it's we're saying is this reasonable? We have a minus 1.5 percent trend rate. And in fact, the data for taxis for 2013 has been released

and the reported losses for 2013 as of the end of December 2013, compared to the report, losses for accident year 2012, at the same time period at December 2012, has decreased for taxis. So--and that's not to say--this is just, you know, one small little bit of data, but to ask if the loss trend rate that has been presented on commercial data, if it's unreasonable for taxi data, is it the information that we have. I stand by the commercial trend rate that we calculated. FA chose to apply a trend rate based on commercial vehicles.

MS. NEWBURY:

Q. Okay.

MS. ELLIOTT:

A. The most recent taxi experience showed that it's fattening, and the reported data as of 2013 shows that it's declined.

MS. NEWBURY:

Q. Okay. So I take it then from your answer that the only reason that you see a downward trend where these numbers seem to show an upward trend, is that these numbers really aren't credible? There's not enough data here to be

credible?

MS. ELLIOTT:

A. No. No, you're mis-speaking. We have been talking yesterday, all week, about the commercial vehicle trend rate. No one has established a taxi vehicle trend rate.

MS. NEWBURY:

Q. But you're proposing that it be used for the taxis?

MS. ELLIOTT:

A. FA is proposing. It's their filing. They asked to use--or they have submitted a filing using commercial vehicles.

MS. NEWBURY:

Q. But you've come up with your own trend rate, have you not?

MS. ELLIOTT:

A. We look at commercial vehicles and establish a loss trend rate. FA looked at the commercial vehicle data -

MS. NEWBURY:

Q. Yes.

MS. ELLIOTT:

A. - which completely separate. Taxis are not a subset of that. And they established a loss

trend rate and said, "I'm going to use my commercial vehicle loss trend rate to adjust my taxi experience." That's what they submitted in their filing.
MS. NEWBURY:
Q. Okay. Now Facility's trend rate is a positive trend rate?
MS. ELLIOTT:
A. That's correct.
MS. NEWBURY:
Q. And yours is negative?
MS. ELLIOTT:
A. That's correct.
MS. NEWBURY:
Q. And so again you're saying that the trend rate that you've identified should be applied to the taxi experience? That's your position?
MS. ELLIOTT:
A. I'm saying that the commercial vehicle trend rate, our measurement of it, is a negative for bodily injury, minus 1.5 percent. FA has submitted a taxi filing. FA has said, "I can't use my taxi data to establish a trend rate. I'm going to use commercial data." We accept that. There's not a better

alternative.
MS. NEWBURY:
Q. Okay.
MS. ELLIOTT:
A. It adds to the uncertainty of the findings.
MS. NEWBURY:
Q. Okay. I'm going to request that the response to CA FA 06 be brought up. Okay, and if you scroll down to the next page. Ms. Elliott, are you familiar with this response from the Facility Association?
MS. ELLIOTT:
A. May I see the question?
MS. NEWBURY:
Q. Sure.
MS. ELLIOTT:
A. Please. Okay, um-hm.
MS. NEWBURY:
Q. So my question is focused on these two graphs. You've indicated that the taxi loss costs are flattening out. I would suggest that these graphs show otherwise, that there is no flattening out if you did a regression analysis over the periods of time covered here.

MS. ELLIOTT:
A. Yeah.
MS. NEWBURY:
Q. And there's two separate periods of time. We've got 2008 to 2012 and we have 2006 through 2012, and both of them show an upward trend and statistically proven.
MS. ELLIOTT:
A. What I said was for the 2010, 2011 and 2012, I said that period was showing a decline. From 2010 to 2011 the decline was minus 3. 3 percent. So what I had stated was that it was flattening out over the more recent period, and that the most recent statistics that have been released by GISA for the taxi experience shows that the reported losses for 2013 are lower than the reported losses at the same point in time for 2012. That was my comment.
MS. NEWBURY:
Q. Ms. Elliott, you've provided a number of data tables and a summary at the end of your report, the CA OW 001 Report.
MS. GLYNN:
Q. Do you have a page reference?
MS. NEWBURY:

Q. Yes, I'm going to refer to the--just to the end of the report. So if you can go and look through the last few pages. It's a general question. So I think starting at about page 11. So page--actually it's page 12, 13, 14 and 15 and 16. There's summary tables there, but there aren't any fitted values based on your final selection of trends?
MS. ELLIOTT:
A. Um-hm.
MS. NEWBURY:
Q. Why don't you provide fitted values in your reports?
MS. ELLIOTT:
A. We had--I thought I provided this in my direct. Perhaps I didn't. We had a comment that they would find the report, and this is from an actuary, that they would find the report more useful if they could see exactly the data, what the loss costs were, what the severity was and the frequency was that we were using to derive our selections, and they weren't all that interested in seeing the, you know, the summary stats that we used to provide in our reports. And so we took that

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and provided the data, and the user had said that they would find that more helpful, that they could use the data, drop it. Every actuary will have a regression model that they use. Drop it into their model, and test you know what they think the loss trend rate is and compare it our selection. And then they can provide comments to us if, you know, or the Board, if they had any alternative suggestions that they wanted to share. So that change was made for that reason.
MS. NEWBURY:
Q. So did the actuary actually tell you, "I don't want to see this. I want you to provide me something else?"
MS. ELLIOTT:
A. Yeah, it was pretty -
MS. NEWBURY:
Q. Or was it the matter of the actuary saying, "I would be helpful if you provided some additional data?" I'm trying to finish my question.
MS. ELLIOTT:
A. Okay.
MS. NEWBURY:

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Q. Ms. Elliott?
MS. ELLIOTT:
A. Yes. Yes, the comment was--I do recall it and the person. They said, "Oh, that's kind of useless. I don't really want to look at your R squares." And I do remember being offended.
MS. NEWBURY:
Q. Yes.
MS. ELLIOTT:
A. But I said, "Okay. That's, you know, valid. We'll provide the data."
MS. NEWBURY:
Q. So then based on one actuary, you've decided to drop out your own fitted values?
MS. ELLIOTT:
A. Yeah. He's a very senior actuary and I respect his opinion, yeah.
MS. NEWBURY:
Q. Who is he?
MS. ELLIOTT:
A. Dr. Ron Miller.
MS. NEWBURY:
Q. Dr. Ron Miller?
MS. ELLIOTT:
A. Um-hm.

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MS. NEWBURY:
Q. And he did not want to have any interest in where you actually put your line, because there's a judgement, I take it? You know, where do you put the line in, how do you determine the intercept? He wasn't interested in knowing what your position was on that?
MS. ELLIOTT:
A. No. Because he's going to do it himself, so that's what he wanted to know. What's your data, I'm going to test it and see if I agree, that was his point.
MS. NEWBURY:
Q. And when you did provide--and Ms. Elliott, on the basis of one request from one actuary that you remove a part of your report, you were comfortable with that, removing that bit of information? What if he'd asked you to remove other components of your report?
MS. ELLIOTT:
A. Well, we would have taken it into consideration, but yes, we listened, we understood his point, that any actuary is going to look at the work and do their own test to decide if they are in agreement and

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this was more helpful. I do, I highly respect Dr. Miller. He's testified here in front of the Board, he's testified in numerous places across the country. I highly value the comment that he provided, we thought it was helpful, and nobody has since said, gee, we want to see those stats. So if somebody sent in a comment and said we'd like to see that data and we also want to see your stats, then we would accommodate that.
MS. NEWBURY:
Q. And in the past when you have done your fitted values--so is it that you do fitted values and you just don't show them, or do you just not do the fitted values now?
MS. ELLIOTT:
A. As part of a regression model, you determine a fitted value. That's part and parcel of it.
MS. NEWBURY:
Q. So you've actually produced that, but you just haven't put it in your report?
MS. ELLIOTT:
A. That's correct.
MS. NEWBURY:
Q. And this is the first time that you eliminated

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it from your report? I think the 2011 report you did include it.

MS. ELLIOTT:

A. No. We did not include the fitted values. What we included in the 2011 report were the regression statistics in that report, which is different from the fitted values.

MS. NEWBURY:

Q. However, to get to the regression statistics, you have to fit a line to the graph, otherwise you can't come up with the residuals or -

MS. ELLIOTT:

A. That's right. That's what a regression analysis is, it's determining a line and those values fall along that fitted line, that's right.

MS. NEWBURY:

Q. And when you do your fitted line, in order to do your regression analysis, do you use the full 15 years of data that you have in your report, or do you just do the smaller subsets of that?

MS. ELLIOTT:

A. As I expressed the other day, we prepare numerous runs on the data that we have, the 15

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years that we review. So yes, we run--the regression stats are produced at the same time as the fitted value is produced, and so they're all done at the same time. We've produced the regression stats and the fitted values.

MS. NEWBURY:

Q. And did you do the regression statistics and the fitted values for the -1.5 trend?

MS. ELLIOTT:

A. No. That would be a misunderstanding, if you ask that question, because the -1.5 percent is derived using averages. As I have stated, we look at ten years of experience ending December '12 and ending June, 2012, and then we look at the five years and we calculate that average, and then we draw in what we selected in our prior report. That number calculates to -1.5 percent.

MS. NEWBURY:

Q. But Ms. Elliott, you do have a line, so you have a trend rate of -1.5, and you have data and you have a line, so I know that you didn't derive that line directly from a regression. You took a model where you have four averages

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and then you averaged that with your prior rate selection, -

MS. ELLIOTT:

A. Yeah.

MS. NEWBURY:

Q. - but you still have a line, you still can take that line, put it on the data, fit it to the data, and do your regression statistics. Why not do that to see how that looks?

MS. ELLIOTT:

A. You could draw the line if you want, but you already have the line from the regression statistics that you're incorporating into your average, and if you put a chart up and you have a line that's -1.7 and that's on a graph for you, you could then draw a line that's 1.5 because that's what your average works out to. I don't know if it's really going to tell me anyway. I already know that we've taken an approach to try to strike a balance between responsiveness and stability, and that's how we come up with our -1.5 percent. I grant you could draw a line if you like, but it's not going to tell me something new. I'm not trying to say if I draw a line of -1.5 and I

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back-fit it to find out what the regression stats are on that -1.5 and how does that compare, that fitted line, to the actual values--we've already established this data is not credible, we've already established that it's volatile. That's why we're picking an average, because it's not credible, it is volatile. So we take an averaging approach. It seems kind of silly to then draw a line for something that's based on an average, not from a regression model. You could do that if you want, but I don't--I think you're going in circles if you do that.

MS. NEWBURY:

Q. But Ms. Elliott, you've stated in your report that a key consideration in determining the lost cost trend rate include how well the regression model fits in a statistical sense, the actual historical data. So you've come up with a model by using averages and by comparing it with prior rate selection, and you've explained the reasons for that, but at the end of the day, you have one model and because you emphasized in your report -

MS. ELLIOTT:

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A. We have one average.
MS. NEWBURY:
Q. It's still a model.
MS. ELLIOTT:
A. It's an average.
MS. NEWBURY:
Q. So you don't consider it to be a model, then?
MS. ELLIOTT:
A. No. I consider the -1.5 is based on an average of other models that we selected. Incorporated in that average is our prior selection. It is an average.
MS. NEWBURY:
Q. Okay. So then your comment, the key consideration in determining the lost cost trend rate, which includes how well the regression model fits in the statistical sense, that actually has no application to your line, which I had assumed was ultimately a model--it's a model based on averages, but you're saying that you don't have to see how that fits the actual data?
MS. ELLIOTT:
A. We just went through the discussion of how the data fits, I provided a summary of the R-

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squares. So we look at the fits for the ten-year model ending December, '12. We look at the fits by severity and frequency. We look at the ten-year models, we look at the five-year model. We exclude various points. We take an average, and then we incorporate our prior selection to strike a balance between responsiveness and stability. That is how the -1.5 percent is calculated. I know from the numbers that we're including in our average, just by how averages work, that -1.5 percent is going to fall in within the numbers that it's based upon, and that's what we select.
MS. NEWBURY:
Q. So Ms. Elliott, I would suggest that the--you know, the key consideration of how well the model fits the line, looking at regression, that doesn't apply to your underlying models that you've averaged, because you've talked about how those are poor results from a statistical point of view, and then you've got an ultimate line which you haven't even tested to see how it fits, because you don't see it to be a model that requires testing. So it seems that your emphasis on this key

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consideration to see how your model fits the data has not actually been followed through.
MS. ELLIOTT:
A. Do you have a question?
MS. NEWBURY:
Q. It's my comment. You can comment on that. I mean, where has that key -
MS. ELLIOTT:
A. I'll only repeat what I've said before, so I think that our approach strikes a balance with responsiveness and stability. The data, whether the models that you looked at that FA has produced, that's selected, or the models that we have selected, the regression statistics, the fits, are not good. Nobody's model is great. The data is not credible, it's very limited. So I don't think anyone can stand up in good conscience and say I've got the perfect fit, mine is great, mine is wonderful, I've got the right answer. That's not the case with this data. It's very limited and volatile, and that is the point that we're trying to make. By drawing in averages, we take in a wider range of possibilities. By picking just one number and

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saying that's it, got the right number, I think it's not--it's not the approach that we want to take, it's not what we've done. In our judgement, we've taken a different approach.
MS. NEWBURY:
Q. Ms. Elliott, you've testified before at another rate hearing, in 2002, and I believe the transcript is available to be brought up on the screen.
MS. GLYNN:
Q. Do you know which date?
MS. NEWBURY:
Q. Yes. December 19th, page 18. If we scroll down to line 64, and your question here, so what I want to try and make clear is that in terms of the loss development factors, your position is that you would use all the data points regardless of variability and your answer "we would use all the data points. It's a random selection that's provided. We don't know why they are what they are. We don't know the various, we have not been advised that there is an errors in the data, so the data that's provided in terms of loss

development factors, what's there we believe could possibly happen again. No one has stated that there was an error in the data." And there's a couple of other references that I'll refer to. Page 20, and lines 57 through 59, and you say "so as we understand the data, it's not an error, and that these data points have occurred and it's possible that they will occur again, and a five-year average is a good balance between responsiveness and stability, and we think that FA's selection of the five-year period of time is reasonable." So again, you're referring to--the data points have occurred and it's possible they will occur again. And if I can refer to Page 23 of that same transcript? Okay, and lines 13 to 16, you start off, "well, I think that's our point. We don't really understand why it's so low. We see that it's happened in the past, in the prior periods of time, and there's no reason to believe it won't happen again, it's plausible." And down on that page, or actually over across on that page, lines 48 through 50, "that's exactly my point, we don't know why it's low. All we know is that it's

happened before and there's no reason to say that it won't happen again. It's very plausible." So it appears here, a reluctance to exclude any data on your part, but notwithstanding that, when you're looking at the loss trend rates, you're routinely excluding data, and the data that you've excluded, if you look at those data points, they seem to be points that could happen again. Facility has done its statistical analysis of the data points that you've excluded and for the most part, none of them would be considered outliers. These are things that are not unusual, they're not out of keeping with the typical data. So why the reluctance here in 2002 to exclude data points? They happened before, they could happen again, there's no reason why there's--you don't know of any reason why they're so low, a reason that would exclude their use in the future. Why would you now, by a matter of course, five-year period, exclude high/low, ten-year period exclude two high/two low. And looking at the SD1 through SD4, the points don't seem out of keeping, they happen two or

three times at the same level within the same, you know, short period of time.

MS. ELLIOTT:

A. Um-hm. So in the context of this hearing, 2002, my recollection is that all these references are in regard to loss development factors, and in that hearing, if my recollection is correct, FA had excluded the high points, so when they were--I'm sorry, FA had excluded the low points. So when they were calculating their average of the loss development factors--not the loss trend rates but the loss development factors, they excluded the low points and included the high points, and that was the issue that was under debate in that hearing. And what these points or comments were made to at that time, that is a different issue than what we're debating here. We've taken an approach of excluding two high and two low for the ten-year trend rates based on the percentage change, and we acknowledge that if we had used the dollar approach, the highest value as opposed to the percentage change, as the basis for exclusions, we'd have even a larger negative

trend rate. So these comments that we made in 2002 were in reference to FA excluding the low values, and as a result of excluding those low values, its loss development factors, we found at the time, were too high and as a result of having loss development factors that are too high--results in loss trend rates that are too high. I mentioned this morning earlier, due to FA's choice in its loss development factors that it chose, its nearly--its loss trend rate is nearly one point higher, the 4.4 percent is nearly one point higher. So these comments were in regards to excluding the low points which caused their loss development factors and therefore, loss trend rates to be higher.

MS. NEWBURY:

Q. But Ms. Elliott, you're still excluding data.

MS. ELLIOTT:

A. Yes, it's -

MS. NEWBURY:

Q. You were reluctant to exclude data at all. You're saying it happened before, it could happen again. What's different about the data points that you're excluding now? They've happened before, they can happen again.

MS. ELLIOTT:
A. Right. So in 2002, the data that was being excluded by FA were the low points, and not the low and the high.
MS. NEWBURY:
Q. But it's still data, you agree? It's still valid data?
VICE-CHAIR WHALEN:
Q. Ms. Newbury, could you confirm with me, was this a taxi filing or was it--in 2002, what was the -
MS. NEWBURY:
Q. That was private passenger.
VICE-CHAIR WHALEN:
Q. It was -
MS. NEWBURY:
Q. Private passenger. Ms. Elliott, did you just indicate that when you have switched your approach from the change--percentage change to looking at the dollar value, that the trend rate has actually gotten worse or it's gone--it goes down even more?
MS. ELLIOTT:
A. What we looked at was that when we calculated the loss trend rate excluding the two high and

the two low points, in some cases--I think there were different examples we presented. So for example, the ten-year ending June, the -3.6 percent changed to minus 2.9 percent.
MS. NEWBURY:
Q. And what are you referring to there?
MS. ELLIOTT:
A. The exhibit we presented at the direct testimony.
MS. GLYNN:
Q. I think it was PE3? Yes, PE5, sorry.
MS. ELLIOTT:
A. So I was referring to this exhibit. The -3.6, the -1.7, that's what we used, the column under the percentage change approach, though excluding the high and the low based on the percentage change from the prior period. If we had used the actual dollar values and excluded those points, the loss trend rates on average would have been lower than if we used the percentage change approach. That was my statement.
MS. NEWBURY:
Q. Did you do the--you're showing here for the five-year ending June 2012 a trend rate of

+1.9 percent and then using the actual values approach, you've got a trend rate of -7.6 percent. What were the P-values associated with that five-year period under the actual values?
MS. ELLIOTT:
A. I don't have that at my fingertips right now.
MS. NEWBURY:
Q. Okay. I'm going to request that you do that, provide the P-values for that. (REQUEST)
MS. GLYNN:
Q. For all four?
MS. NEWBURY:
Q. Just the five-year ending June--yeah, sure, all four. I'm going to refer back to the transcript from the 2002 hearing, December 19th, Page 19, and lines 85 to 86, which is on the right-hand column--right-hand side. Okay, and your comment here, and it continues on to the next page but starting here, "if you understand why that outlier is what it is, if you go back and as an actuary working for a company, certainly you have knowledge of the data and you can find out, you know, that--and that's the actuary's job, to find out why this

is so low, what happened here, and you go back and you investigate and you may find out it's just the randomness in the data, or you may find out, you know, the claims adjusters, they've made this big mistake and it will never happen again. So it's the actuary's job to understand the data, and if you can't provide a rationale for why the numbers are what they are, to be unbiased you really shouldn't exclude too many points." So how is that approach and that reluctance, which seems to be consistent throughout your testimony, to exclude data points, unless you have a very good reason to do that--how does that fit with what you're doing now, which is excluding, as a matter of course, data points?
MS. ELLIOTT:
A. In this particular context, our point was that FA had excluded the low points, not the high points. There was not any information provided by FA to explain for their book of business why they were excluding those points. This is loss development factors. This is not trend rates. This is a different calculation. It's looking at how costs--how the estimate

over time, of estimating what those ultimate costs would be, what those values are, taking averages. So how claims cost from 18 months to 24 months, how they change. So it's looking at that for each incremental period fro 6 to 12, 12 to 18. We look at the averages. FA, in calculating it, excluded the lows and included the high points. They didn't have a balanced approach. That's what we were taking issue with, and our point was that it's important to go back and understand the data, to ask questions, and that applied to all the--you know, the elements that are presented. You have to look at the results, the output, and try as best you can to understand the results and see if they make intuitive sense. I think that is the actuary's job, not to just run a model, look at the P-test and T-est and R-squared and say, oh, you know, they're good, I'm done. I think it's more than that. It's understanding the data, and that's important. And I believe if I was trying to make that point at that time, I'd be making the same point today.

MS. NEWBURY:

Q. Yeah, but Ms. Elliott, it is still data. I realize that this is a focus on loss development and here we're focusing on the trend rates, but--and you're critical, apparently, of what was happening back then, your observation that they were excluding the low points, but through our exercise this morning, you've identified that effectively, through your percentage change approach, you've actually outlined or excluded as outliers the high points. More often than not, you're excluding points that are sometimes over the line, even though you've identified them as a low point. What analysis did you do, as an actuary, to go back and check to see, should I exclude this?

MS. ELLIOTT:

A. I wish that we could go back to this industry data for commercial vehicles and understand it better. I wish we could understand the large swings from period to period that we looked at, you know, +95, -14, up and down. I wish we could, but that's not possible. The data is provided to us. But if I'm working in a company--that was the point, if I'm working in

a company and--I can walk over and ask the claims staff is there something going on, did you change how you reserve things? I think the onus is upon the actuary to go figure it out. Go talk to the claims people, go talk to the underwriters. Try to understand the data. You may not get the answer, but at least you tried, and it's no different than presenting a reform factor of -73 percent. We wouldn't accept that. We would go and we'd talk to our colleagues or talk to the claims staff and say, are you really seeing this, is this real, is this good--you know, is this a good number to present? I think that's the actuary's job, and our approach for loss trend work is to take an averaging approach, we try to smooth it out. It's our judgement that that's a reasonable approach. We exclude the two highs and the two lows. If we just excluded the highs, you know, that wouldn't be appropriate either. We try to take a balanced approach and exclude the two highs and the two lows. The discussion back in 2002 was that FA was not balanced, it excluded the low value so they got a high loss development factor that

led to high loss trend rates that led to a higher indication. That was the driver or the key issue in that filing.

MS. NEWBURY:

Q. And I think that the comment would equally apply in this hearing--that, you know, our perception is that it's clear from the evidence you've tended to exclude the higher points, and how is that a balanced approach?

MS. ELLIOTT:

A. Well, I acknowledge that if we had excluded, on a dollar basis, the highs and the lows, the loss trend rate that we would have selected, all else being equal, would have been a larger negative than the -1.5 percent that we presented for BI.

MS. NEWBURY:

Q. And we'll be interested in finding your information about the statistics on that, because I think that we'll find, and I'll put it to you, that your mechanical approach--when you've moved from the percentage change to the dollar value, your mechanical approach of excluding outliers, you know, regardless of how they might look from a statistical point

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of view, will result in poor statistics with
your trend models, and I will request -
MS. ELLIOTT:
A. Well, I can comment on that. Any of the statistics that are presented by anybody, FA or Oliver Wyman, are not strong statistics. We're dealing with very few claims. So the statistics presented by FA for its models are not strong, and I can assure you if I presented statistics for any of the runs that we do, they're not going to be strong either. We only have a few claims every year. There is no way you're going to get strong statistics.
MS. NEWBURY:
Q. Ms. Elliott, I'm going to request that you provide your lost costs 15-year regressions for the two periods. Actually, this is I think what we requested yesterday, 1998H1 to 2004H2, 2004H2 to 2012H2, and for property damage and accident benefits as well, and include fitted values, residuals, projected values to 2015H2, and to include your fit statistics including your R-squared, the adjusted R-squared and P-value, and your T-

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statistic, and charts showing the actual and fitted values from 1998H1 to 2015H2. And it's requested that when you provide the charts, because we've asked for other charts as well, if you could try to keep the periods of time consistent, so include the same amount of data so that you have the same year showing on your--on the line showing the years, just so that the scale of them will be consistent from one period of time to the next. Is that--want to make sure that you understand what I'm saying. (REQUEST) Sometimes the charts might look different because you've got a different period of time, but we want to be able to compare the five-year with the ten-year with the 15-year so that the years line up.
MS. ELLIOTT:
A. We'll try our best, yeah.
MS. NEWBURY:
Q. Thank you.
MS. GLYNN:
Q. Can I ask the reason for this request? I mean, I think that's quite a body of work for Ms. Elliott to undertake in this hearing.
MS. NEWBURY:

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Q. Yeah. I mean, Ms. Elliott has referred to, a number of times, that she's done a lot more analysis and--aside from what's been presented here. We've been of the impression that, you know, what's been produced is what's done, and she's referring to all of these wonderful models that she does and she has indicated that she can do them quite quickly, so I think it's fair that she provide this. The other point is that she is now presenting a different approach using the dollar value, and she referred to trend rates from those lines, and I think it's fair that she provide it.
MS. GLYNN:
Q. Which are not used in her findings or her recommendations.
MS. NEWBURY:
Q. Well, she certainly referred to it in her evidence. I mean, if she's going to abandon -
MS. GLYNN:
Q. But that's not the basis for her recommendations.
MS. NEWBURY:
Q. Well, it's certainly there as part of her evidence. I think it's fair that we ask and

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test that information.
MS. GLYNN:
Q. Ms. Elliott, how long would it take you to do that work?
MS. ELLIOTT:
A. Making sure that the graphs are as stated will take some time, and I have to look at the other things--it will take some time. I don't know how long, at this point.
MS. GLYNN:
Q. I think we can provide that undertaking with the understanding that it's going to take probably in excess of two weeks for us to do that. We spoke about a week for some of the undertakings that we had already given this morning. I don't know if that affects our timing for -
MS. NEWBURY:
Q. Okay. If the charts are a problem, you know, we can--yeah, we'll keep the stats but skip the charts.
STAMP, Q.C.:
Q. Three regressions.
MS. GLYNN:
Q. Do you understand the request that's being

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made?
MS. ELLIOTT:
A. I heard three regressions, but that's not enough for me from -
MS. GLYNN:
Q. Okay.
VICE-CHAIR WHALEN:
Q. Ms. Glynn, could I made a suggestion, and Ms. Newbury, could you put your undertaking in writing? That would just make it a lot easier and we won't have this.
MS. NEWBURY:
Q. Sure, that's fine. Yeah. Thank you. Those are all the questions I have for you, Ms. Elliott.
CHAIRMAN:
Q. So it's over to you, sir.
MS. PAULA ELLIOTT, CROSS-EXAMINATION BY MR. THOMAS JOHNSON
MR. JOHNSON:
Q. Thank you, Mr. Chairman. Ms. Elliott, I'll be relatively brief, probably take about 20 minutes. Ms. Elliott, have you ever heard from Facility Association in response to any of the prepared--the drafts such as we've seen

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at CAOW1, which provides your analysis, which undergirds the Board's directives as regards loss selection or the trend rates or the loss development factors?
MS. ELLIOTT:
A. It's my understanding that FA has not provided any comments that were sent to the Board or, you know, subject to check, that would be my understanding.
MR. JOHNSON:
Q. Okay, and there's--you know, we just finished somewhat of a discussion about, you know, what I might politely all discovery-on-the-fly here, but were you asked any RFIs at all in this proceeding about any of the background work that you did in relation to your report?
MS. ELLIOTT:
A. None.
MR. JOHNSON:
Q. Ms. Elliott, as you're aware, each time this Board issues its approved loss trends and development factors, the Board advises all insurers, including FA, that insurers may use these factors without requirement for supporting data or rationale, and it also

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advises insurers that those insurers who wish to use factors other than those accepted by the Board will be required to provide satisfactory data supporting the chosen factors and rationale why these selected factors are more appropriate for us. You're familiar with the Board's guideline in that regard?
MS. ELLIOTT:
A. Yes.
MR. JOHNSON:
Q. And Ms. Elliott, in this case, it's clear to anybody that's witnessed this proceeding, read the reports, that you do not believe, I take it, that FA has put forward adequate justification for their chosen factors and trends. So I'll ask you the question: in your view, what type of information or data would you expect to see in order to justify a departure from the Board's approved loss trends and development factors?
MS. ELLIOTT:
A. It's my opinion that FA's selected loss trend rate of +4.4 percent is premised on using the period 2004-2 to 2012-2. There's an exclusion

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of a very high point in there, which I believe is 2012--2011-2, a high point, but they derive this 4.4 percent starting with 2004-2, and it's my view that because they use that time period, and because the first two accident half years in that time period are quite low, it drives up--so they start at a low point and end up here, and they end up with this +4.4 percent. We spoke about the--I spoke about the loss development factors that FA selected based on a combination of--that were GISA's factors--that appear to be GISA's factors, that are losses and allocated loss adjustment expenses as opposed to just losses, as they had inferred in their report. That drives up that 4.4 percent by almost a percentage point. So there's that issue. Then the other issue is that assuming that the reforms caused a great reduction in costs of 37 percent, then FA is now starting with data at the low point, 2004-2, out to, you know, 2012-2, and because of that, they're getting a higher trend rate. If FA had used one less year of data and started with 2005-2, they would get a couple of point percentage drop in their trend rate.

And if they bought into the common acceptance that the reforms did not affect cost to a material or measurable degree, if they had used a ten-year period, if they had used the modified loss adjustment expenses--sorry, loss development factors that I refer to, they would have a much lower loss trend rate. That's probably a long-winded answer for you, but that's my comment on their selection.

MR. JOHNSON:

Q. So just to get back, I'm sort of asking a question, almost a question out of principle. You know that the Board receives a report from you, the report goes out for comment to those insurers who want to comment upon it, indicating that you can use these or if you wish to depart from them, you can do that but you've got to put forward justification. So from a general point of view, what sort of justification would you expect to see in order to justify departure from what the Board has said is reasonable.

MS. ELLIOTT:

A. Well, I mean, in this particular case, I think that FA should justify a value for the reform

factor that--I mean, it's our opinion, we find it intuitively unreasonable for the reform factors that are presented, and we're not seeing reform factors of that level from other rate filings that are provided. FA, in its prior filing, said that the reforms had no impact on cost, and because they're doing that, which seems completely out of keeping with other rate filings and what they themselves have presented in the past, I think they need stronger justification that costs have really reduced by 37 percent. And I don't mean a P-test or a T-test because I still don't--you can have the best R-square, P-test, T-test that you want. I don't believe that AB costs reduced by 73 percent because of some reforms or some other event in the second half of 2004. I think we get a lot stronger evidence of that, and as a result of that kind of basic assumption that FA is sticking to, they are now starting a loss trend model with 2004-2 data, which happens to be low just due to the random nature of data, a low point, and they end up with a higher loss trend rate. So what more information? They need to be able

to really support that those reform factors dropped the cost to that degree, and yeah that's--and more than a P-test.

MR. JOHNSON:

Q. You referred several times yesterday and more times today, that in your trend analysis you're attempting to strike a balance between responsiveness to the data and stability for each review you prepare, and I'd like to ask you--this is a rate-making process that we're embarked upon here, how--explain the significance or the importance, if you think it is significant or important, of responsiveness to the data and stability from each review in relation to the rate-setting process?

MS. ELLIOTT:

A. Well, the selected loss trend rate is a large driver of the rate indications, and what we are doing in preparing a report each six months when the new data becomes available, is to try and present what we think is--repeating the words, but a reasonable value for the loss trend rate. You know, the data is very thin; it's limited. So, you know, we believe that

our approach of averaging and drawing in our prior selection strikes that balance of being responsive and stable from review to review. It's no different than when we review a rate filing and somebody completely changes their selection approach, for whatever element, whether it's loss development factors, trend, credibility, any of the elements in a rate filing, we want to see some rationale for that. And if we were to just change our approach in each report that we prepared, for this body of data because it's so volatile, we would get pretty different answers each time. So, we're trying to present something that's useable to the insurers. An the insurers have the choice to use--you know, they want to use a loss trend rate, they have to use the most recent version of the loss trend rates that are available. And if we produced a report that we thought, gee, we got the best fit and in the answer was -5 and six month later we got another report and it was +5 because that was the best fit. And then an insurer will say, well, gee, I just filed my rates and I used -5 and now two weeks later you say it's

+5, you know, I'm not so happy with that. So, you know, one of the things was that we want a stable approach to what we're presenting because these are loss trend rates that are available for the insurers to use, if they so chose to. So that's part of the rationale of having a stable approach to our selection.
MR. JOHNSON:
Q. There was a lengthy discussion this morning of the two approaches having to do with removing data points, that being by percentage change versus dollar values. You indicated that in hindsight you preferred to use dollar values and that would, I take it, have the effect of lowering the loss cost trend.
MS. ELLIOTT:
A. In this particular circumstance.
MR. JOHNSON:
Q. In this particular circumstance. If you were to use that dollar value approach, what would it produce in terms of a rate indication in this particular application?
MS. ELLIOTT:
A. I don't know the answer to that. I would have to do some calculations, but would lower it

from the +20 percent that we have.
MR. JOHNSON:
Q. Okay. Could you provide that? (REQUEST)
MS. ELLIOTT:
A. Yes.
MR. JOHNSON:
Q. Ms. Elliott, in relation to the expense provision, in your report you observed that Facility Association assumes a total variable expense provision of 20 percent of premium. And your report also observed that although you found--and this is, I'm not sure of the page reference, you may not need to go there, I was going to provide you with what I took from it. Your report also observed that although you found the expense provision is the accurately included in the calculation of the rate level change, you did note that there was to be an actual average allowance per taxi of $463.00 to process and underwrite and $278.00 for commissions and you indicate that Board may wish to confirm the reasonableness of these amounts. And what caused you to raise this point or concern for the Board's attention?

MS. ELLIOTT:
A. Because they're variable, as the premium increases, the provision for underwriting or commission would increase as well. And the underlying point that I think could be addressed is is that actual cost to underwrite and process the policy any different now if FA was to have a rate increase that is proposed, of any sort, whether it's +15 percent or +20 percent. So, that is the issue. Just because the premium goes up, do the actual cost for handling and processing and issuing the paper, does that change?
MR. JOHNSON:
Q. Were you able, based upon the record in this proceeding with the request for information back and forth on the point from the Board to Facility, satisfy yourself on the point as to whether the reasonableness of these amounts can be confirmed?
MS. ELLIOTT:
A. No, I mean, we don't--as part of FA's filing they don't provide what their actual costs are. They include the provision that is stated in the FA Agreement. I'm not sure the

terminology of the document, but it's a contractual agreement between FA and the servicing carriers for what they're allowed for these services that they provide. And that is the inclusion that FA does when it calculates its rate indication. So, you know, my opinion, they are doing the calculations according to the rules, but we're not provided with what are the actual costs. We only know how much they load into the rates. So, they might load a certain number into the rates, but I don't know what it actually costs them to do it.
MR. JOHNSON:
Q. In relation to the owner/driver discount, I don't know if the recent Facility undertakings are on the computer system, are they?
MS. GLYNN:
Q. Yes, I think we have them, yes.
MR. JOHNSON:
Q. Okay. Would you mind bringing up FA's answer to undertaking 1107C? This basically was a request from me to Facility to provide how long the two existing underwriting rules, being namely the discount for owner/operator

and secondly the rating for dual usage vehicles have been in place. And my focus now is on the first paragraph. In their response they indicate that the owner/operator discount has been in Newfoundland for at least 15 years. And they say "the FA's Rates and Rules Committee completed a review of the current FA rating manual and it was agreed that FA, due to its position of market of last resort, should remove all discounts". Ms. Elliott, do you accept that this provides a sound justification for the Facility Association to ignore the risk differential between owners and non-owners?

MS. ELLIOTT:

A. No, it's not support to say that the discount has no merit. What we've been focusing on in this review is the total rate level need for FA. A separate matter is, you know, how much should you pay whether you're in this territory or that territory or you're an owner/operator or you're not. So, as I understand it, there hasn't been information support provided that would say that discount has not merit and should be excluded or

removed.

MR. JOHNSON:

Q. So, I guess--and I understand that this is not a size of the pie issue, it's how you slice up the pie.

MS. ELLIOTT:

A. Right.

MR. JOHNSON:

Q. But do you have a view point as to whether it's valid to say, look, we are a market of last resort, we are going to look to remove all discounts even if some of the discounts are reflective of a change of risk between insured to insured.

MS. ELLIOTT:

A. Um-hm.

MR. JOHNSON:

Q. Would that be a valid -

MS. ELLIOTT:

A. Well, no, I mean, a rate program has different rating factors and that's the idea, we know what the total pot is that we need. We need this much money and then we divide it up, depending upon maybe your driving record or where you live and what type of car you drive.

In this particular case for taxis, they have--one of their divisions is whether you're an owner/operator or not. So, if FA's choice to remove it here, they're proposal to remove it would cost, all those being equal, they just remove that discount, would cause them to collect more premium, but it's not a justification that I can read here that says that that is the technically right thing to do. That that discount is not supported. I don't know if that this discount ever supported, but it certainly--they haven't provided information to say it is supported to remove it.

MR. JOHNSON:

Q. From a risk perspective.

MS. ELLIOTT:

A. From a risk perspective, yes.

MS. GLYNN:

Q. Mr. Johnson, just before we move on, I just want to clarify for the Board records and for the transcripts that was Undertaking 9. It's just a little bit different in the Board's records.

MR. JOHNSON:

Q. Okay.

STAMP:

Q. Sorry, I didn't follow that.

MS. GLYNN:

Q. It was Undertaking 9. When Mr. Doherty filed the undertakings, he had it listed at 11C and just a difference in the record keeping, that's all. And if we look for that when we go back to the transcript we probably wouldn't find it.

MR. JOHNSON:

Q. Finally on the territorial differentiation, and we recognize that that is, there's no change proposed in this application whereby the territories would be differentiated at all. But I was wondering if you have any views in connection with that topic, there was an RFI or two from the Board on the question and I'm just interested in your views on it.

MS. ELLIOTT:

A. Right. Well, that was interesting to see because there was a very clear difference between the, I believe it was the loss ratios that were provided between the territories. There was a grouping of the territories. So, I think that's an interesting avenue to pursue. If I lived in--if I was a taxi operator in the territories that were materially different, those loss ratios than the higher rated territory, I'd be interested in having a lower rate that could be supported, if possible, but on the other side of the coin, the people in the other territory that has the higher experience, they are going to have to pay more. So, once the amount is set, that is a fair rate in total for FA, if it's determined that you should have a split by territory, some people are going to have to pay more and some people less. So I think of the statistic support that there should be a difference. I think that's a good change, but at the same time there's winners and losers in that process.

MR. JOHNSON:

Q. I guess we're not dealing with a lot of commercial data and then we're dealing with not many taxi -

MS. ELLIOTT:

A. Even less.

MR. JOHNSON:

Q. - even less, I mean, how much comfort, how much experience would you look to or what sort of standards would you employ in terms of the amount of data that you'd need before you -

MS. ELLIOTT:

A. There's not much data, so if we sort of say, oh gee, I'd like to see a credible sample, that's not going to happen here. But what I would look at in this particular circumstance is regarding though the severity is volatile, you know, you have really large claims and that makes the severity very high one year and then not the next year, but in this circumstance I would look at the claim frequency rate. What's the frequency rate of claims in those territories that appear to have the lower loss ratios compared to the frequency rate in the other territories with the higher loss ratios. And if I could see some consistency in the differences, that would give me more comfort that there's, you know, maybe there is something to that data that it's meritith (phonetic) to pursue that idea of having different rates by territory.

MR. JOHNSON:

Q. Okay. Those are my questions, thank you.

MS. GLYNN:

Q. We had actually agreed that Ms. Newbury, if there was anything coming out of Mr. Johnson's questions.

STAMP, Q.C.:

Q. We have nothing arising.

MS. GLYNN:

Q. Thank you. I'll be short and sweet. I just have a couple of points of clarification.

MS. PAULA ELLIOTT, CROSS-EXAMINATION BY MS. JACQUI GLYNN

MS. GLYNN:

Q. Ms. Elliott, have you changed anything in your analysis, mid hearing, of FA's filing?

MS. ELLIOTT:

A. No, we have no. We did comment that due to an error made by FA in the transfer of its data from the prior filing into this current filing, that error was found by the Consumer Advocates consulting actuary. And as a result, our findings are a little bit lower, 1 point lower.

MS. GLYNN:

Q. So, that's the only change that you made to your report filed May 16?

MS. ELLIOTT:

A. Yes.

MS. GLYNN:

Q. Ms. Elliott, what loss trend report was in place and approved by the Board when FA filed this application in March of 2014?

MS. ELLIOTT:

A. The loss trend rate using data through to December 2012.

MS. GLYNN:

Q. And that would be the report that's file in CA OW 1?

MS. ELLIOTT:

A. Correct.

MS. GLYNN:

Q. Has that loss trend report been changed?

MS. ELLIOTT:

A. No, it has not.

MS. GLYNN:

Q. So, the change that we've been talking about from the actual values to the percentage values, when did you return to that use of the actual values?

MS. ELLIOTT:

A. Well, we returned to that approach starting

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with the June 2013 report.
MS. GLYNN:
Q. So, what impact has that change to return to the actual values have on the analysis and on this hearing?
MS. ELLIOTT:
A. It doesn't have any impact on what we're saying our findings are, our reported findings in this hearing, no.
MS. GLYNN:
Q. So, you stand by the analysis that you did for your report of May 16 and for the analysis that you did for the last trend report filed with CA OW 1.
MS. ELLIOTT:
A. Yes.
MS. GLYNN:
Q. Okay. Ms. Elliott, you were asked to provide a visual aid circling the excluded data points on SD 1 to SD 4.
MS. ELLIOTT:
A. Yes.
MS. GLYNN:
Q. Were those the experience periods, the trend rate periods that you had used?

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MS. ELLIOTT:
A. No. It didn't display what--the time periods that we had used, that was different.
MS. GLYNN:
Q. Okay. So, Ms. Elliott, we have prepared PE Exhibit 7. I'd like to bring that up please? And Ms. Elliott, could you explain this exhibit to us, please?
MS. ELLIOTT:
A. Sure. If you could make it smaller, please?
MR. MCNIVEN:
Q. Do you want them all on the one page?
MS. ELLIOTT:
A. Yes. So, this is our ten year model on the left hand side are the model data points that we would exclude if we were using the dollar value approach, the orange dots. And on the right hand side are, in fact, data points that we excluded on a percentage basis. So, -
STAMP, Q.C.:
Q. Just for the record, can we make sure we're speaking about the right graph, are we in the top left corner of Undertaking 20?
MS. GLYNN:
Q. Ms. Elliott is explaining what each graph

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represents, yes, so we are on the first page of the ten year models. PE Exhibit 7, it was circulated this morning.
MS. NEWBURY:
Q. It's not part of Undertaking 20, it's a separate -
MS. GLYNN:
Q. No, no.
MS. NEWBURY:
Q. So, PE number 7?
MS. GLYNN:
Q. Yes.
MS. NEWBURY:
Q. Thank you.
MS. ELLIOTT:
A. So, we tried to present the graph here using ten years of data and on the top two graphs are using the data through to June 2012. The bottom two graphs are using the data through to December 2012. On the right hand side are the points marked by a dot that represent the points that were excluded on a percentage basis. And on the left hand side what the dots would be if we had done the exclusion on a dollar value basis. So, we thought that

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would be helpful to see that there are some differences in the points that would have been excluded. And that's a ten year model and then we can look at the five year model which is the next page.
MS. GLYNN:
Q. So, that graphs on the right hand side of each page show the data points that you excluded for the time periods that you used.
MS. ELLIOTT:
A. That's correct.
MS. GLYNN:
Q. Okay. And the graphs on the left hand side show what you would have excluded had we used actual values, but the impact of those graphs on this hearing?
MS. ELLIOTT:
A. There's no impact on this hearing, it's just information that we shared.
MS. GLYNN:
Q. Those are my questions.
CHAIRMAN:
Q. Do you have any?
VICE-CHAIR:
Q. No questions.

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CHAIRMAN:
Q. I just got--so what you're basically telling us is that the small accident population that you're dealing with makes actuarial calculation very difficult?
MS. ELLIOTT:
A. Yes, challenging.
CHAIRMAN:
Q. And if you had a larger population, your results would be--you could determine your results much more accurately.
MS. ELLIOTT:
A. You'd have more confidence in your results, yes.
CHAIRMAN:
Q. Okay. I think that's -
MS. GLYNN:
Q. Mr. Wells, I think Ms. Newbury did actually have a point of clarification.
MS. NEWBURY:
Q. Yes, just on those PE Number 7, the graphs, the ten years models, is that including 21 data points for 10 1/2 years? It's hard for me to read the actual values there on that graph.

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MS. ELLIOTT:
A. I think we started, we put in the first point was twenty--sorry, I can't see the scale--there we go. You know, I'm sorry, I can't read that.
MS. NEWBURY:
Q. Okay, I'm having the same difficulty. It's been pointed out that the are 21 dashes there, would there be a dash for every point? Is that a way to sort that out?
MS. ELLIOTT:
A. Probably because we're using the June period, like when we do, ending June it shifts up one, so we showed it all.
MS. NEWBURY:
Q. So, it would be ten and a half years, where you've done a ten year and then you shifted it back half a year.
MS. ELLIOTT:
A. Yes.
MS. NEWBURY:
Q. Okay, and the same for the five year models on the next page. That would 11 data points, 5 1/2 years?
MS. ELLIOTT:

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A. Right.
MS. NEWBURY:
Q. Thank you, those are all my questions.
CHAIRMAN:
Q. I think we're finished, thank you very much.
MS. GLYNN:
Q. Just one more point, Mr. Wells, sorry, just to put on the record that we have agreed that the hearing will conclude by way of written submissions.
CHAIRMAN:
Q. Yes.
MS. GLYNN:
Q. So, we will not be coming back to this esteemed place. Submissions will be made by Tuesday, December 16 and there will be an opportunity to reply to anything raised in those submissions and that must be filed by Friday, December 19. You're free to go.
CHAIRMAN:
Q. Thank you.
Upon conclusion at 1:22 p.m.

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CERTIFICATE

I, Judy Moss, hereby certify that the foregoing is a true and correct transcript in the matter of a Facility Association Application re: Taxi and Limousine Automobile Insurance Rates heard on the 18th day of November, 2014 before the Board of Commissioners of Public Utilities, 120 Torbay Road, St. John's, Newfoundland and Labrador and was transcribed by me to the best of my ability by means of a sound apparatus.
Dated at St. John's, Newfoundland and Labrador this 18th day of November, A.D., 2014
Judy Moss
Discoveries Unlimited Inc.

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