

NORTH CAROLINA DEPARTMENT OF INSURANCE  
RALEIGH, NORTH CAROLINA

STATE OF NORTH CAROLINA  
COUNTY OF WAKE

BEFORE THE  
COMMISSIONER OF  
INSURANCE

IN THE MATTER OF:

THE FILING )  
DATED JANUARY 3, 2024 BY )  
NORTH CAROLINA RATE BUREAU )  
FOR THE REVISION OF )  
HOMEOWNERS INSURANCE RATES )  
)

**COPY**

Docket No. 2157

BEFORE: AMY FUNDERBURK, HEARING OFFICER

TRANSCRIPT

OF

HEARING

VOLUME III - A.M. SESSION

Raleigh, North Carolina

October 9, 2024

9:00 a.m.

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

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Hearing in the matter of the filing dated January 3, 2024 by the North Carolina Rate Bureau for revised homeowners' insurance rates, at the North Carolina Department of Insurance, 3200 Beechleaf Court, Raleigh, North Carolina, on the 9th of October, 2024, at 9:00 a.m., before Renee M. Habrack, RPR, and Notary Public.

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P R O C E E D I N G S,

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MS. FUNDERBURK: Good morning. Good morning, counsel. We are back on the record.

ALL COUNSEL: Good morning, Your Honor.

MS. FUNDERBURK: Thank you. When we recessed yesterday, Mr. Friedman had concluded his cross of Mr. Anderson, and we recessed until the morning to allow the Rate Bureau to conduct their redirect of Mr. Anderson.

Are there any matters that we need to address before we proceed with Mr. Anderson's testimony?

MR. BEVERLY: None for the Rate Bureau, Your Honor.

MR. FRIEDMAN: I'd just like to raise the issue, Your Honor, that the when we got the transcript from yesterday and about 20 to 25 minutes ago, I have had some chance to review it, simply not all. And in the event that I think there is any need for recross, I would appreciate a ten-minute break to finish reviewing the transcript.

MS. FUNDERBURK: I think we can allow that. Let's get through redirect first, and then we will address that matter. And I will ask you to either

1 pull your microphone closer or to speak a little more  
2 loudly for the microphone.

3 All right. Mr. Beverly, are you  
4 prepared to call Mr. Anderson?

5 MR. BEVERLY: Yes, Your Honor.

6 Mr. Anderson, please come around.

7 MS. FUNDERBURK: And, Mr. Anderson, I  
8 will remind you that you do continue to be under oath.

9 MR. BEVERLY: May I proceed, Your Honor?

10 MS. FUNDERBURK: Please proceed.

11 REDI RECT EXAMI NATION

12 BY MR. BEVERLY:

13 Q. Good morni ng.

14 A. Good morni ng.

15 Q. Mr. Anderson, you were asked lots of  
16 questions yesterday about ASOPs. Do you recall those?

17 A. Yes, I do.

18 Q. Are those the Actuarial Standards of Practice  
19 we've been referring to?

20 A. Yes, that's correct.

21 Q. Would you agree that the ASOPs provide  
22 guidance to actuaries on how they perform actuarial  
23 tasks?

24 A. Yes, I would. In fact, ASOP 1, the first  
25 one, does state that ASOPs are binding on all U.S.

1 actuaries, but it also says that considerations may be  
2 given to other items. Examples of those might be  
3 regulatory requirements or evolving actuarial practices  
4 or professional judgments.

5 Q. And you were specifically asked some  
6 questions regarding ASOP 29. Do you recall those?

7 A. Yes, I do.

8 Q. There is a notebook in front of you that  
9 should be turned to Bates-stamped pages 46 and 47. Do  
10 you see that?

11 A. Yes, I do.

12 Q. Would you confirm that those pages are  
13 reflecting ASOP 29 in that notebook?

14 A. Yes, I confirm that. It's ASOP 29.

15 Q. Would you turn with me to provision 3.14,  
16 which is on Bates-stamped page 47?

17 A. Okay.

18 Q. Does that provision speak to an actuary's  
19 reliance on the expertise of others?

20 A. Yes, it does.

21 Q. And does it provide that in determining the  
22 appropriate level of reliance, the actuary should take  
23 into account several things?

24 A. Yes, it does.

25 Q. Would you read into the record what those

1 subsections provide should be taken into account,  
2 please?

3 A. Yes. I will read the entire section for  
4 3.14. "An actuary may rely on the expertise of others  
5 including actuaries not performing actuarial services  
6 in the fields of knowledge used in developing expense  
7 provisions. In determining the appropriate level of  
8 such reliance, the actuary should take into account the  
9 following: A, whether the individual or individuals  
10 upon whom the actuary is relying has expertise in the  
11 applicable field; B, the extent to which the work  
12 product being relied upon has been reviewed or opined  
13 on by others with expertise in the applicable field,  
14 including any significant differences of opinion  
15 commonly known among those with expertise concerning  
16 the aspects of expense provisions that could be  
17 material to the actuary's work product; and C, whether  
18 there are legal, regulatory, professional, industry, or  
19 other standards that apply to the work product supplied  
20 by others with expertise in the applicable field and  
21 whether the work product has been represented as having  
22 met such standards."

23 Q. And did you adhere to all of those standards  
24 in -- relative to your work in this case?

25 A. Yes, I did.



1 MS. FUNDERBURK: And, Mr. Beverly, just  
2 for clarification of the record, I will note that  
3 you're reading from exhibit -- what's been marked as  
4 Exhibit 12 in book -- Book 3 from the Department of  
5 Insurance, just for clarity of the record. My  
6 apologies for interrupting.

7 MR. BEVERLY: No, thank you, Your Honor.  
8 That's a good catch.

9 Q. Mr. Anderson, would you, also in ASOP 29,  
10 turn with me to Bates-stamped page 46 in Book 3  
11 contained in Exhibit 12?

12 A. Okay.

13 Q. Do you see that?

14 A. Yes.

15 Q. And would you agree that provision 3.7  
16 provides that if the actuary determines that  
17 policyholder dividends are reasonably anticipated, the  
18 actuary should consider including the anticipated  
19 amount of policyholder dividends in the expense  
20 provisions. Do you see that?

21 A. Yes.

22 Q. Then, in connection with developing any such  
23 dividend provision, 3.7 speaks to some additional  
24 considerations. Do you see those?

25 A. Yes, I do.

1 Q. Would you read those into the record, please?

2 A. "When developing an expense provision for  
3 policyholder dividends, the actuary should take into  
4 account the company's dividend payment history, its  
5 current dividend policy or practice, whether dividends  
6 are related to loss experience, investment results, the  
7 capital and surplus of the company, and other  
8 considerations affecting the payment of dividends."

9 Q. Now, are those considerations applicable to  
10 dividends for a single company or a hypothetical one  
11 company system representing all companies in the state?

12 A. This provision uses the word company,  
13 singular. It is possessive, so it's company apostrophe  
14 S, but because it's singular, it would apply to an  
15 individual company.

16 Q. And not, say, to a hypothetical one company?

17 A. Correct.

18 Q. Is dividend information retrievable by the  
19 Rate Bureau?

20 A. Yes, it is. Historical dividend amounts or  
21 historical information is available in individual  
22 company's statutory annual statements, which can also  
23 be evaluated for the aggregate industry.

24 Q. If one were to review those statements  
25 looking for individual company's policies or procedures

1 relative to dividends, could that be found?

2 A. No. That level of detail specific to  
3 dividend policies and procedures is not included in the  
4 statutory annual statement, only the amounts of the  
5 dividends are included.

6 Q. You were asked questions yesterday regarding  
7 ASOP 30, specifically relative to the term in the  
8 definitions "total return."

9 Do you recall that?

10 A. Yes, I do.

11 Q. In that discussion, you were asked questions  
12 about unrealized gains, investment income, agent  
13 balances, and the like.

14 Do you recall those questions?

15 A. Yes, I do.

16 Q. Would you consider those as contributing to  
17 accounting returns or cost of capital?

18 A. Those would relate to accounting returns. As  
19 I mentioned yesterday, and Dr. Zanjani mentioned on  
20 Monday, the cost of capital relates to the required  
21 return of investors or those that provided capital or  
22 surplus of a company, does not include the actual  
23 return on a company's assets.

24 Q. Switching gears slightly. Did your prefiled  
25 testimony in this filing disclose any instances where

1 you felt applicable law demanded the departure from  
2 actuarial standards?

3 A. No.

4 Q. Did you comply with all actuarial standards  
5 applicable to your work in this case?

6 A. Yes, I did.

7 Q. Did you do anything illegal in connection  
8 with your work in this filing?

9 A. No, I did not.

10 Q. Have you violated any professional standards  
11 relative to your work in this filing?

12 A. No, I have not.

13 Q. You were asked questions yesterday about  
14 reinsurance allocation.

15 Do you remember those?

16 A. Yes, I do.

17 Q. And you stated in your testimony that it's  
18 theoretically possible for a company to allocate its  
19 reinsurance costs to a specific state. Do you remember  
20 that testimony?

21 A. Yes.

22 Q. Presuming that's the case, are there data  
23 available to the Rate Bureau to do that?

24 A. No. Actual reinsurance costs were not  
25 available to the Rate Bureau in preparation for this

1 filing. That type of information or that specific data  
2 is not included in the statistical data calls that are  
3 used to inform this rate filing, and those data calls  
4 are promulgated by the Commissioner of Insurance.

5 Q. And even presuming such data were available,  
6 what challenges and limitations would such a review  
7 represent or present, excuse me?

8 A. Sure. If individual companies were able to  
9 provide their cost to reinsurance, it's likely that  
10 they would -- they would differ quite a bit from  
11 company to company. Different companies would have  
12 different assumptions. They may use different  
13 hurricane models that would make it -- make it  
14 difficult to combine. It wouldn't be appropriate to  
15 combine that information. So, yeah.

16 Q. When you say not appropriate, is that from an  
17 actuarial perspective?

18 A. Yes.

19 Q. You were asked some questions yesterday about  
20 Aon's reinsurance work for the Rate Bureau in this  
21 filing. Do you recall those?

22 A. Yes, I do.

23 Q. I believe you testified you did not, at any  
24 point, see actual prices for the reinsurance analysis  
25 that Aon presented. Do you remember that?

1 A. Yes, that's correct.

2 Q. Is your understanding that Aon looked at  
3 actual reinsurance cost contracts to perform that work?

4 A. Yes. My understanding is that Aon's work was  
5 based on their database or their catalog of actual  
6 reinsurance contracts.

7 Q. There was an apparent suggestion by some  
8 questions yesterday that one could collect current or  
9 historical reinsurance costs to develop projected costs  
10 in a rate filing. Do you recall those questions?

11 A. Yes, I do.

12 Q. Is that plausible?

13 A. It's potentially possible, but it's not  
14 appropriate. If the Rate Bureau were to collect and  
15 evaluate historical reinsurance costs over the last  
16 three to five years, those would need to be projected  
17 into the future because that's what a rate filing does  
18 is we project costs into the policy period for which  
19 the rates are being priced. And, for one thing,  
20 reinsurance contracts or reinsurance prices can change  
21 significantly from year to year depending on the  
22 availability of surplus for the reinsurers or depending  
23 on the market. So, to look at multiple years of  
24 historical costs and try to project those several years  
25 into the future would not be appropriate. When

1 individual insurance companies include reinsurance  
2 costs in their rates and included in their rate  
3 filings, they are typically -- they have access to the  
4 existing reinsurance contracts or upcoming reinsurance  
5 contracts, and they're building in those actual costs  
6 into the immediate future, so there isn't the lag  
7 between several years of history and projecting it  
8 several years into the future.

9 Q. So, would canvassing reinsurance costs from  
10 several years ago would be useful for this exercise?

11 A. No, it would not.

12 Q. You were asked questions yesterday regarding  
13 the contingency provision included in this filing. Do  
14 you recall those?

15 A. Yes, I do.

16 Q. And you explained in your testimony the  
17 purpose of a contingency provision and your support for  
18 that provision in this filing; is that correct?

19 A. Can you repeat that, please?

20 Q. Sure. You testified about the purpose for a  
21 contingency provision?

22 A. Yes, I did.

23 Q. And you testified about arriving at the  
24 contingency provision by the committees approved in  
25 this filing, correct?

1 A. Yes, I did.

2 Q. You -- in that context you were asked about  
3 any examples of legal decisions that might qualify as  
4 the, quote, "adverse legal decisions," closed quote,  
5 such as those mentioned in ASOP 30. Do you recall that  
6 line of questioning?

7 A. Yes, I do.

8 Q. Have you done any more investigation into  
9 that aspect of the filing?

10 A. Yes. I identified two recent cases in North  
11 Carolina that would fit into that categorization.  
12 Recently there were the Piedmont roofing cases, which  
13 related to assignment of benefits, and also the Ha  
14 versus Nationwide case that related to cancellation of  
15 homeowners' policies. Both of those are recent  
16 examples of potential adverse court decisions.

17 But just to, kind of, reiterate what I  
18 mentioned yesterday, the analysis that I did regarding  
19 the impact of regulatory delays and filings, that was  
20 only one of the reasons that would support a  
21 contingency provision. So, these potential adverse  
22 judicial decisions is yet one more additional reason as  
23 to why contingency provision is appropriate.

24 Q. And, in fact, those two examples, the  
25 Piedmont roofing cases are going on right now, aren't



1 they?

2 A. That's my understanding, yes.

3 Q. And the Ha v. Nationwide decision is this  
4 year, correct?

5 A. Yes. If I read my notes correctly, my  
6 understanding is that that was decided on for the  
7 company, but it is potentially going to the supreme  
8 court.

9 Q. And, in fact, both of those decisions deal  
10 with property coverage, don't they?

11 A. That's correct, yes.

12 Q. Some of the questions you were asked  
13 regarding contingency also suggested that a contingency  
14 factor is designed to recover a prior rate need. Do  
15 you recall that line of questioning?

16 A. Yes, I remember.

17 Q. Do you agree with that?

18 A. No, I do not. I also mentioned several times  
19 yesterday that the contingency provision is intended to  
20 represent the difference between the estimated costs  
21 and the actual costs. So, it's a prospective  
22 perspective rather than retrospectively trying to  
23 recoup rate inadequacies.

24 Q. You were, likewise, asked some questions  
25 yesterday regarding the consequences of a settlement of

1 a filing by the Commissioner and the Rate Bureau. Do  
2 you recall that line of questioning?

3 A. Yes, I do.

4 Q. And the suggestion that several rates  
5 produced a legal rate. Do you recall that?

6 A. Yes, I remember that term.

7 Q. Would -- should that occur, when that occurs,  
8 would that settled rate be an adequate rate, in your  
9 opinion?

10 A. To the extent that a settled rate or legal  
11 rate is below the indicated rate, it would not be  
12 adequate. In fact, the difference between that legal  
13 rate and the indicated rate would be the amount of the  
14 rate inadequacy as a result of that settlement.

15 Q. What happens when the legal rate is not  
16 adequate?

17 A. If the legal rate is not adequate, member  
18 companies may make decisions based on that -- business  
19 decisions related to that. One certainly potential  
20 reaction would be to increase their use of consent to  
21 rate, and another one is that they may refuse to write  
22 certain policies or certain risks. So, that would  
23 present an increased demand on the residual market in  
24 North Carolina.

25 Q. In fact, in your observation is that what

1 we're seeing right now?

2 A. Yes. I recently looked at just the  
3 distribution of premiums, and the percentage of premium  
4 in the state that corresponds to consent to rate  
5 policies has increased significantly in the last couple  
6 years.

7 Q. Is that further evidence that the current  
8 rates, which result from the settlement of the last  
9 filing for homeowners, is inadequate?

10 A. Yes. The combination of them being  
11 inadequate, and the fact that it's been several years  
12 since a rate filing has been submitted and implemented.

13 MR. BEVERLY: May we have a moment, Your  
14 Honor?

15 MS. FUNDERBURK: Yes, go ahead.

16 MR. BEVERLY: Thank you, Mr. Anderson.  
17 Those are all my questions. The Department counsel may  
18 have some.

19 THE WITNESS: Thank you.

20 MS. FUNDERBURK: I just have one  
21 follow-up or two follow-up questions, Mr. Anderson.

22 You mentioned you had reviewed the  
23 incidents of consent to rate, and that it had increased  
24 over the last few years, and I've read many transcripts  
25 from 2014, including some of your comments, Mr. Spivey.

1 So, I have a general understanding of where we thought  
2 it was then. What percentage of policies in North  
3 Carolina are written on a consent to rate basis, to the  
4 extent you are aware of what that percentage is?

5 THE WITNESS: So, the information I had  
6 was premium, not policies, which is a fair  
7 representation. The latest year, which I believe is  
8 2023, showed that 56 percent of the premium was  
9 attributable to consent to rate policies. In years  
10 prior to that, it has been hovering around 50 percent.  
11 So, it'd ebb and flow, I don't know, between maybe 48  
12 and 52 percent, but in the last year it spiked up to  
13 56.

14 MS. FUNDERBURK: To the extent you are  
15 aware, and I will give -- I will tell counsel, you  
16 certainly have the opportunity to also clarify what my  
17 questioning is or express any concerns.

18 Is it your opinion that if the rates  
19 were increased, the consent to rate percentage of  
20 premium of premiums written in consent to rate would go  
21 down?

22 THE WITNESS: Yes. That's my opinion  
23 and observation even. If you looked at that historical  
24 percentage of premium written on consent to rate,  
25 you'll see a dip down in that percentage when the last

1 rates were implemented. So, it actually coincided  
2 directly with the rate changes. So, when the Rate  
3 Bureau rates went up even 4 or 5 percent, there was a  
4 couple percentage point drop in the percentage of  
5 premium on consent to rate. So, it actually directly  
6 responded to the change in the Rate Bureau rates.

7 MS. FUNDERBURK: Is that data --  
8 Counsel, is that data that would be contained in the  
9 information you've submitted? You've submitted quite a  
10 bit. I don't necessarily expect an answer to that  
11 right off the bat.

12 MR. BEVERLY: May we have a moment, Your  
13 Honor?

14 MS. FUNDERBURK: Yes.

15 MR. BEVERLY: It's not in the filing,  
16 Your Honor.

17 MS. FUNDERBURK: Thank you.

18 With the change in percentages you saw,  
19 when there was an increase in premium and a  
20 corresponding decrease in policies written -- and I'm  
21 sorry -- premiums written on a consent to rate basis,  
22 did that result in an overall reduction of the amounts  
23 paid by consumers or -- and, again, to the extent that  
24 you're aware, how did that actually impact consumers in  
25 North Carolina?

1 THE WITNESS: I didn't look at that  
2 specific detail. It probably could be obtained by  
3 looking at industry written premiums for homeowners.  
4 However, there are a lot of other characteristics and  
5 nuances that impact premium. The primary one is the  
6 amount of coverage provided to each homeowner typically  
7 goes up every year, which is going to, then, result in  
8 a corresponding premium increase. So, there is --  
9 actuaries would distinguish between a premium increase  
10 and a rate increase. Premiums are the dollars that are  
11 paid, based on whatever the risk characteristics are,  
12 and the risk characteristics change from year to year.  
13 Whereas, the rates -- that underlying -- the rate  
14 level, the base rates, and all the rating factors that  
15 are used to determine those premiums.

16 So, it will be difficult just to look  
17 at, kind of, publicly available industry premiums to be  
18 able to specifically answer that question. I would  
19 anticipate that the premiums continue to go up each  
20 year simply because the values of the properties are  
21 going up each year.

22 MS. FUNDERBURK: Thank you.

23 Counsel, based on the questions that I  
24 have asked Mr. Anderson, do you have any follow-up  
25 questions you would like to ask him?

1 MR. BEVERLY: No, Your Honor.

2 MS. FUNDERBURK: Thank you.

3 Mr. Friedman, I understand you would  
4 like to recross?

5 MR. FRIEDMAN: I would.

6 MS. FUNDERBURK: I also understand you'd  
7 like a recess to look at the transcript.

8 MR. FRIEDMAN: I'd appreciate that.

9 MS. FUNDERBURK: I will remind counsel  
10 the purpose of recross is to examine based on what we  
11 have heard on redirect, and I will allow, at this time,  
12 a ten-minute recess.

13 So, we are off the record at 9:23, and  
14 we will come back at 9:35. Thank you, Counsel. We are  
15 off the record.

16 MR. BEVERLY: Thank you, Your Honor.

17 MR. FRIEDMAN: Thank you, Your Honor.

18 (Recess taken from 9:23 to 9:36.)

19 MS. FUNDERBURK: Good afternoon again.  
20 We are back on the record, 9:36, resuming the hearing  
21 to allow Mr. Friedman to complete his recross.

22 I will remind Mr. Anderson you remain  
23 under oath.

24 Mr. Friedman, are you ready to proceed?

25 MR. FRIEDMAN: I am.

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REXCROSS EXAMINATION

BY MR. FRIEDMAN:

Q. Mr. Anderson --

MS. FUNDERBURK: Mr. Friedman, if you could -- again, I'm very guilty of this. If you could project a little more, get your microphone --

MR. FRIEDMAN: I hadn't turned it on. A necessary first step.

Q. Mr. Anderson, on the question of dividends that you were asked, going to Exhibit 12, Document 210, my first question is, are you aware that there are, in essence, two things called data calls? One, a data call issued by the Commissioner for insurance companies, the things that they need to include in their annual statements. Do you know that call, a data call?

A. Yes.

Q. And then there are separate data calls, are there not, that the Rate Bureau issues to its members in order to put together its filings?

A. That's my understanding.

Q. So, in that separate data call with regard to dividends, is it possible for -- whether or not it's burdensome on the members, is it possible for the Rate Bureau to include questions about dividends and general



1 policies on dividends?

2 A. So, for -- regarding a data call for  
3 dividends, if you're referring to dividend amounts, I'm  
4 not sure that data call would be necessary because that  
5 information is already available in annual statements.  
6 So, the dollar amounts of dividends is available  
7 through statutory annual statements.

8 So, there is two components -- because then  
9 the ASOP also refers to just the business, the policies  
10 and practices that companies employ to issue dividends,  
11 so the decision-making process to determine if the  
12 dividend is needed or desired there.

13 In response to your question, yes, that could  
14 be included in a data call. Like you said, it would be  
15 burdensome on the companies, but that could be  
16 requested.

17 Q. All right. Now, looking at 3.7 of ASOP 29,  
18 you testified that it would be very burdensome to  
19 particularly figure out the policies or practices of an  
20 insurance company or maybe all the North Carolina  
21 homeowners members. Whereas, you could figure out at  
22 least the raw number of dividends that are paid out; is  
23 that correct?

24 A. That's correct.

25 Q. Okay. 3.7 doesn't say that you can turn

1 your -- blind your eyes to the actual dividends paid  
2 out if you don't have data about the policy or  
3 practice, does it?

4 A. That's correct. And the Rate Bureau  
5 evaluates the historical dividends to determine a  
6 provision for policyholder dividends.

7 Q. And we talked a little bit yesterday on the  
8 nature of dividends, policyholder dividends  
9 particularly, but are you aware of whether there are  
10 certain North Carolina homeowners' carriers that don't  
11 issue dividends?

12 A. Yes, I am aware of that. Some companies  
13 issue dividends and some companies do not.

14 Q. And are you aware of whether, among those  
15 companies that issue dividends, they issue those  
16 dividends to only some of their policyholders?

17 A. I'm not aware of that detail. I don't know  
18 that the Rate Bureau could easily be aware of that  
19 detail because, again, the Rate Bureau relies on  
20 aggregated information coming from documents like  
21 statutory annual statements. It's summarized on an  
22 aggregate basis. It's not looking at individual  
23 policyholders or individual segments of the book of  
24 business.

25 Q. But it could ask in the data call, their data

1 calls?

2 A. I believe it's the Commissioner's data call  
3 on behalf of the Rate Bureau. That's my understanding.  
4 I might be misspeaking there, so a little clarification  
5 there. I mean, in theory, anything could be asked for  
6 in a data call.

7 My understanding is that the more detailed  
8 data that's requested from companies, I think they  
9 would resist providing proprietary information related  
10 to their business practices and their decision-making  
11 practices, which is what I interpret when you talk  
12 about dividend policies and practices. Those can  
13 change in the middle of a year, that's -- I think that  
14 would be very difficult to collect that, and there  
15 would be considerable pushback from companies for that  
16 level of detail.

17 Q. I was talking about the data calls that are  
18 issued by the Bureau, not the ones that are mandated  
19 for the individual insurers to file their annual  
20 statements. Could they ask for that level of detail  
21 about dividends in the data calls issued by the Rate  
22 Bureau?

23 A. In any data call you can ask for detail, but  
24 the more detail you ask for, my experience is that the  
25 greater pushback, the greater resistance you will get

1 from companies, because that's their proprietary  
2 business practices.

3 Q. Would you agree that if the company serves  
4 proprietary interests in their, for example,  
5 dividend -- policyholder dividends policies, if they  
6 assert that those are proprietary, that is the -- that  
7 means there is less data for an actuary to review in  
8 order to comply with 3.7; is that correct?

9 A. The primary information that actuaries would  
10 need related to dividends corresponds to the dollar  
11 amounts. Those are easily obtainable. They can be  
12 observed throughout history. So, they are fairly  
13 consistent when we look at the state of North Carolina.  
14 The aggregate amount of dividends across all the member  
15 companies is generally quite stable, which means that  
16 information is reliable, and that's the level of  
17 information that actuaries need to -- for the Rate  
18 Bureau to, then, select a provision for policyholder  
19 dividends and the rates.

20 Q. Notwithstanding the fact, though, you said --  
21 so, now, you're saying that really all actuaries need  
22 is the raw numbers for the dividends, but 2.9 suggests  
23 there are other questions that the actuaries should  
24 ask.

25 A. I didn't say that that's all they need.

1 That's the primary piece of information that they need.  
2 If -- if -- if there are other considerations, which  
3 should be taken into account, but to do the  
4 calculations of a rate indication, the primary  
5 information needed are numeric. It's quantitative  
6 information. Other additional qualitative information  
7 certainly would be useful if it's readily available.  
8 There is a balance in, kind of, evaluating what's the  
9 cost to obtain that information and what's the  
10 potential benefits in using that information.

11 So, if the Rate Bureau were to request all of  
12 the dividend policies and practices of companies, and  
13 if that requires hundreds of man hours for these  
14 companies to put that together to present it in a  
15 format that is either requested by the Rate Bureau or  
16 usable for the Rate Bureau, and that at the end of the  
17 day it doesn't affect the selection, there is a cost  
18 benefits comparison there. A tremendous amount of cost  
19 for no benefits, so.

20 Q. How do you know -- why do you think it would  
21 take so long for the company to be able to simply say  
22 these are the discretionary factors on which we --  
23 based on which we grant policyholder dividends?

24 A. This is just based on my experience working  
25 for a company or working with companies is that for a

1 company to provide policies and practices, internal  
2 documents or internal information, that they are not  
3 going to pull something off the shelf and just send it  
4 in, that it will be reviewed and scrutinized and  
5 determined, is this what we are allowed to share? Are  
6 we able to share this? Are we comfortable sharing  
7 this? That they want to make sure that the information  
8 that's being provided is acceptable to the company, and  
9 is it also answering the questions, is it answering the  
10 request.

11 So, you know, even if that's an hour or two,  
12 which if there are multiple parties involved in a  
13 company, it would be more than that, you multiply that  
14 across over 100 member companies, that's where I got to  
15 hundreds of hours of man hours there.

16 It -- my experience, interacting with  
17 companies, is it's not a simple process of simply  
18 answering a question. Different companies have  
19 different internal processes. A recent project I had,  
20 as we were requesting data from several companies, some  
21 of them were able to respond very quickly and very  
22 easily. Others, it took ten times, 15 times longer  
23 than those more efficient companies or more expedient  
24 companies. They're -- it just varies significantly  
25 from company to company, and it's a big request to do

1 that.

2 Q. You've talked about proprietary interests.  
3 We talked yesterday about proprietary interests of  
4 model makers, and today you've talked about proprietary  
5 interests of insurance companies. But, just to be  
6 clear, it's the insurance companies who decide what  
7 they want to assert the proprietary interest in,  
8 correct?

9 A. That's my understanding.

10 Q. All right. So, that's within the control of  
11 the company?

12 A. That's correct.

13 Q. And you testified yesterday that more data is  
14 generally good for actuaries?

15 A. That's correct.

16 Q. Okay. So, if a company asserted a, just as  
17 an example, proprietary interest in their policies on  
18 granting dividends, that's less data, correct, than an  
19 actuary could need to calculate the dividend provision?

20 A. That would be less information available for  
21 the actuary, yes.

22 Q. And, again, that would be the result of the  
23 insurance company's decision that it didn't want to  
24 share that information with the Commissioner?

25 A. Yes.

1 Q. Also, yesterday, I guess, you testified about  
2 the -- I believe it was the dividends, that you've  
3 never seen one period that wasn't discretionary. I  
4 guess I should say, I think your actual testimony --  
5 let me rephrase that -- was that you've never seen any  
6 insurance company who's ever guaranteed a policyholder  
7 dividend?

8 A. I believe that's correct, yes.

9 Q. So, moving on to the -- you had some  
10 questions about the issue of the hypothetical one, and  
11 I -- please correct me, Brian, or you, Mr. Anderson, if  
12 I am a wrong, but you talked about that in the context  
13 of data about premium costs for the net, or were you  
14 talking about that your the context of the dividends?

15 A. Well, the hypothetical one company applies to  
16 the entire rate filing, so it could have been any --  
17 either of those matters or other -- other items we  
18 talked about yesterday.

19 Q. Okay. I was just this morning, though.

20 A. Oh.

21 Q. This morning you were mentioning it in a  
22 particular context. Could you remind me which one that  
23 was?

24 A. That was related to the dividends and the  
25 fact that the ASOP here refers to a singular company as



1 opposed to an aggregate hypothetical one company.

2 Q. So, even though the Bureau has to create its  
3 filings based on a hypothetical insurer, a single one,  
4 nonetheless, it has to base those calculations for the  
5 hypothetical one on the actual data of its members; is  
6 that correct?

7 A. That's correct.

8 Q. And if you don't ask for the actual data,  
9 then they -- from the actual members, then their  
10 calculation of any factor in the filing is much more  
11 conjecture; would you agree?

12 A. Depends on the components. I mentioned that  
13 policyholder dividends are publicly available in the  
14 statutory annual statements. So, the Rate Bureau would  
15 need to request that information, and it would be  
16 available in the annual statements of each company.

17 Q. Well, let's go to, for example, the question  
18 of the net and the premium, the prices -- the premium  
19 prices for purchasing reinsurance. If -- you talked  
20 yesterday about the -- that insurance companies might  
21 assert proprietary interests over the costs of, for  
22 example, their national reinsurance treaties.

23 Do you recall that testimony?

24 A. Yes.

25 Q. Okay. The -- if they assert proprietary

1 interests over the cost of their reinsurance premiums,  
2 once again, that's in the control of the insurance  
3 company, correct?

4 MR. BEVERLY: Objection. Your Honor.  
5 We're bleeding beyond the scope of redirect.

6 MS. FUNDERBURK: It does seem to be  
7 you're getting a little far from redirect,  
8 Mr. Friedman.

9 MR. FRIEDMAN: That's fine.

10 Q. So, you had answered a question from the  
11 Commissioner about CTR?

12 A. Yes.

13 Q. And CTR, is it your understanding, could go  
14 up to 250 percent more than the manual rates?

15 A. That's my understanding.

16 Q. And a hypothetical, if a -- currently a  
17 homeowner's carrier in North Carolina is charging a  
18 policyholder for 200 percent of the manual rate, so  
19 they are all receiving that, and then the Department  
20 raises the manual rate by the 42.4 percent that the  
21 Bureau's requesting, do you believe that insurance  
22 company is going to drop from 200 percent of the  
23 manual -- the former manual rate down to the former  
24 manual rate plus the 42.4 percent increase that's been  
25 granted?

1           A.     It's possible that they might. There are  
2 many characteristics that impact the premium. So, that  
3 specific policy may have claim activity, the value of  
4 the home, again, may have gone up. There could be  
5 other things that influence a company's decision on how  
6 to incorporate a Rate Bureau's 42 percent increase into  
7 their consent to rate. If the risk remains the same, I  
8 would antic- -- and if the company believes that the  
9 premium at a 200 percent CTR consent to rate level is  
10 appropriate, my understanding is that they would reduce  
11 that rate, that premium by 42 percent.

12           Q.     No, I wasn't asking whether they'd reduce it  
13 by 42 percent, but whether they'd reduce it to the new  
14 manual rate. Because they have been granted -- the  
15 Bureau has been granted the 42.4 percent increase in  
16 the manual rate, would -- have you ever seen an example  
17 of an insurance company willingly giving up 158 percent  
18 of the premium it was charging?

19           A.     If the company believed that a premium at  
20 200 percent of the manual rate is the appropriate  
21 premium for that risk, going back to the manual rate  
22 plus 42 percent would be grossly inadequate for that  
23 risk. So, they need 200 percent of the manual rate,  
24 which if they need 200 percent for that particular  
25 policy, a 42 percent increase is not going to get them

1 there. They would still need to apply consent to rate  
2 but for a smaller percentage.

3 Q. So, in other words, you think it's very  
4 unlikely that a company would ever go down from the  
5 200 percent they are already charging to the manual  
6 rate because of alleged inadequacy; is that right?

7 A. Not in that scenario you described. If a  
8 policy is 20 percent above the manual rate on a consent  
9 to rate, and then a 42 percent rate increase is applied  
10 to the manual rate, that policy may now have a 15, 20,  
11 25 percent deviation, downward deviation applied to it.  
12 So, the example you considered was a very extreme  
13 example. For all of those policies that are between  
14 zero and 40 percent above the manual rate, if the Rate  
15 Bureau were to receive the 42 percent increase, those  
16 could all not only have consent to rate removed, they  
17 could all have deviations -- downward deviations  
18 applied to their policy, and they'd now be getting  
19 discounts to the manual rate.

20 Q. Do you know what the median CTR charged by  
21 companies in North Carolina is?

22 MR. BEVERLY: I'm sorry, did you say  
23 median?

24 MR. FRIEDMAN: The average.

25 A. In the Rate Bureau's filing, we calculate a

1 total net deviation, which is a combination of  
2 deviations -- downward deviations in consent to rate.  
3 So, I know that number, but I don't know the average --  
4 off the top of my head, I don't know the average  
5 consent to rate amount.

6 Q. So, I have one last question about that  
7 issue. When you said that in my example that the  
8 reason they would not drop their rate by 158 percent  
9 would be because of inadequacy, are you saying that the  
10 company -- that insurance companies only charge CTR  
11 where it's actuarially needed as opposed to where they  
12 can?

13 A. As an actuary, the premiums would be driven  
14 on --

15 MS. FUNDERBURK: I am going to ask  
16 for -- I'm sorry to interrupt. We apparently have some  
17 noise going on. Mr. David has stepped out to take a  
18 look and see what that might be. And I don't want to  
19 interfere with the ability of the court reporter to  
20 create the transcript or with your concentration,  
21 Mr. Anderson.

22 MR. FRIEDMAN: Should we go off the  
23 record?

24 MS. FUNDERBURK: We are off the record.

25 (Recess from 9:58 to 10:00.)

1 MS. FUNDERBURK: All right. We are back  
2 on the record. I apologize for that interruption.  
3 Sometimes you never quite know what's going to happen  
4 during a hearing. It may be rushing water outside with  
5 the pavement being cleaned. So, thank you for your  
6 indulgence of that short break.

7 And my apologies to, Mr. Anderson, for  
8 breaking his testimony. I will, again, remind you you  
9 continue to be under oath.

10 Please continue, Mr. Friedman.

11 Q. Mr. Anderson, you stated for that -- well,  
12 let me ask it this way, so are you saying that if a  
13 company is charging 200 percent of the manual rate,  
14 then the actuary assumes that is actually the necessary  
15 rate?

16 A. Yes, that's my understanding, that the  
17 premium that companies would be applying, if it's at a  
18 200 percent level, would be actuarially sound based on  
19 the different risk characteristics on that policy and  
20 their evaluation of the cost of those risks.

21 Q. So, that's -- your assumption is that if an  
22 insurance company has selected a particular rate, then  
23 it must be because it's actuarially sound?

24 A. Yes, we are bound to that by the statement of  
25 actuarial principles.

1 Q. I understand you are, but I'm talking about  
2 the insurance company. Would you -- what do you -- you  
3 assume that if they were charging a rate, then it must  
4 be actuarially sound. I'm not talking about to their  
5 actuaries. I understand that their actuaries must  
6 believe that, but do you think the insurance company  
7 might have different reasons to simply get as much as  
8 they can?

9 A. No. Insurance rates are required to be not  
10 excessive, not inadequate, and not unfairly  
11 discriminatory. So, that's what actuaries adhere to  
12 and actuaries, presumably, would inform company  
13 decisions. So that's what companies would adhere to,  
14 to the extent they respond to the actuaries.

15 Q. So, you believe that companies, aside from  
16 what their own actuaries might say, don't just try to  
17 maximize their premiums but, instead, always act  
18 according to actuarial principles?

19 A. Certainly I don't know what every company  
20 decision is or how they base those decisions. The  
21 actuarial guidance and direction is the primary  
22 components, in my opinion, of what drives rates. In  
23 addition to that, I mean, there are many other  
24 considerations. Another one might be that if that  
25 200 percent rate level does not correspond to the risk,

1 if it's not actuarially sound, then there will be ten  
2 other companies that offer a rate at a lower rate that  
3 is actuarially sound. If competition would provide a  
4 rate that is not at 200 percent, then that policyholder  
5 would go elsewhere. So, if the appropriate rate is at  
6 200 percent relative to the manual, to the rate manual,  
7 then that would be the actuarially sound rate. I mean,  
8 there are so many other components and considerations.  
9 If that was not the actuarially sound rate, that would  
10 drive that rate down, things like competition in what  
11 other companies would offer.

12 Q. So, again, one last question on this. Even  
13 though the insurance company has actuaries who may have  
14 said that, for example, the actuarially sound rate is  
15 150 percent of the manual rate, you don't think there  
16 are instances where insurance companies simply say  
17 thank you for that, but we are not bound by the  
18 actuarial rules or standards of practice, and we are  
19 going to charge 200?

20 MR. BEVERLY: Objection, Your Honor.  
21 Asked and answered. I'm not sure how many ways he can  
22 answer the same --

23 MS. FUNDERBURK: Sustained.

24 MR. FRIEDMAN: Okay.

25 Q. Do you think that you have a very idealistic



1 view of why insurance companies charge what they  
2 charge?

3 A. No. I believe it's a realistic view. I've  
4 worked for an insurance company. Insurance companies  
5 are my clients. I understand that -- that a profit  
6 component is part of their rates, so they certainly are  
7 in the business of making money, but they are heavily  
8 regulated. And that profit is, if you want to say,  
9 monitored or evaluated to make sure that it's not  
10 excessive. The rates, at a very granular level, are  
11 evaluated and reviewed and approved by state insurance  
12 departments.

13 So, the insurance industry is very heavily  
14 regulated, and each of these components that contribute  
15 to profit are very, very heavily monitored and  
16 regulated. So, they may have corporate objectives, but  
17 they are doing it under -- under actuarial guidelines  
18 and other guidelines that result in rates that are  
19 actuarially sound and appropriate for the market.

20 Q. And, yet, the Commissioner in 2014 found that  
21 the Bureau's requests for an increase was not  
22 actuarially sound, correct?

23 A. I don't recall the specifics of that order.

24 Q. Do you recall that the order significantly  
25 lowered the request, the requested rate?

1           A.     Yes.

2                           MR. BEVERLY:  Obj ecti on, Your Honor.  
3 Beyond the scope of redi rect.

4                           MS. FUNDERBURK:  Sus --

5                           MR. FRIEDMAN:  I 'm just asking hi m a  
6 questi on about what he sai d, Your Honor.

7                           MS. FUNDERBURK:  I am going to sustain  
8 the obj ecti on.

9           Q.     We talked about the cost of capi tal on  
10 redi rect and your understanding, I believe, of what  
11 Professor Zanjani meant when he used the term "cost of  
12 capi tal . "

13                           Do you recall that testi mony?

14           A.     Yes.

15           Q.     Okay.  And if I understand the disti ncti on  
16 you made woul d be between what cost of capi tal means to  
17 an accountant as opposed to what it means to an  
18 economi st; is that fair?

19           A.     I don' t know how an accountant woul d defi ne  
20 cost of capi tal.  My earlier statement referred to  
21 accounti ng returns.  That' s measuri ng financi al resul ts  
22 that have occurred.  They are on the financi al books.  
23 You can look at i nvestme nt i ncome.  You can look at  
24 unreali zed gai ns, di fferent components that you talked  
25 about yesterday.  Those are measurabl e.  Those are on

1 the financial statements. Those are accounting  
2 returns. That has already occurred.

3 Cost of capital, as Dr. Zanjani mentioned  
4 many times, and I mentioned many times, is the return  
5 required by investors. So, they are expecting a  
6 certain amount of return on the capital that they  
7 provide. It's an expectation. It's not what has  
8 occurred and what's in the financial records.

9 Q. Okay. So, I should have -- rather than said  
10 accounting returns rather than accounting. Is it fair  
11 to say that the distinction you are making is between  
12 what cost of capital would mean in terms of accounting  
13 returns versus what it means in Dr. Zanjani's  
14 testimony?

15 A. I'm not sure I understand the question. Can  
16 you repeat?

17 Q. So, I understood what you just said to be  
18 that there is the term "cost of capital" that will show  
19 up in accounting returns; is that correct?

20 A. Well, I was distinguishing between cost of  
21 capital and accounting returns as two very different  
22 things.

23 Q. I understand you're saying they are different  
24 concepts.

25 A. It sounds like you're trying to mesh them

1 together and --

2 Q. No. I respect your contention that they are  
3 different concepts. So, my question is, I understand  
4 you're making that distinction. Do you know whether --  
5 how familiar are you with the methods used in the 2014  
6 order by your colleague, Dr. Appel, or your former  
7 colleague, and by Dr. Vander Weide?

8 A. Only at a high level.

9 Q. Is it your understanding that when they use  
10 the term "cost of capital," they were intending to  
11 refer to this different concept about the expected  
12 return as opposed to referring to the accounting  
13 results that show cost of capital?

14 A. I don't recall that specifically from the  
15 2014 filing, but I would anticipate, based on my  
16 previous observation of the cost, that their definition  
17 of cost of capital would be consistent with  
18 Dr. Zanjani's.

19 Q. And are you aware that the Court of Appeals,  
20 nonetheless, held that Dr. Vander Weide's and  
21 Dr. Appel's testimony did contemplate the cost of  
22 capital?

23 A. I was not aware of that.

24 Q. So, you've not read the Court of Appeals  
25 decision, if I recall, in 2014?

1           A.       Not recently.

2                           MR. FRIEDMAN: That's all I have, Your  
3 Honor.

4                           MS. FUNDERBURK: Thank you, Counsel.

5                           MR. BEVERLY: May we have just a moment,  
6 Your Honor?

7                           MS. FUNDERBURK: (Nonverbal response.)  
8 (Brief pause.)

9                           MR. BEVERLY: Nothing further, Your  
10 Honor.

11                          MS. FUNDERBURK: Thank you.

12                          Mr. Anderson, I appreciate your time for  
13 the last few days. You may step down.

14                          THE WITNESS: Thank you.

15                          MR. BEVERLY: Your Honor, may we have a  
16 moment to reposition?

17                          MS. FUNDERBURK: Yes.

18                          (Brief pause.)

19                          MS. FUNDERBURK: Madam clerk, would you  
20 swear Ms. Mao in.

21                                       MINCHONG MAO,  
22 having been duly sworn, was examined and testified as  
23 follows:

24                          MS. FUNDERBURK: And just quickly,  
25 before we get started, Ms. Mao, I understand that you

1 will be on the stand for quite some time. I will ask  
2 you periodically if you need a break. But if you do  
3 need a break, just let the Court know. We will try to  
4 take breaks when it fits smoothly into testimony, but,  
5 again, I understand you're going to be with us for a  
6 while and may need to take a break here and there, just  
7 keep us posted if you do. Okay?

8 THE WITNESS: Okay.

9 MS. FUNDERBURK: Thank you.

10 Counsel, please proceed.

11 MR. SPIVEY: Thank you, Your Honor. And  
12 just for the record, the Bureau is calling Ms. Minchong  
13 Mao as the next witness, and we have just had her sworn  
14 in.

15 DIRECT EXAMINATION

16 BY MR. SPIVEY:

17 Q. Good morning, Ms. Mao.

18 A. Good morning.

19 Q. Would you please state your name and business  
20 address for the record.

21 A. Minchong Mao. I work for Aon, and the  
22 business address is 200 East Randolph Street, Chicago,  
23 Illinois, 60601.

24 Q. Thank you.

25 Ms. Mao, did you prepare prefilled testimony

1 and exhibits that are included in the Rate Bureaus' s  
2 2024 homeowners' rate filing?

3 A. Yes.

4 Q. And are your testimony and exhibits included  
5 in that filing as Exhibits RB-7 through Exhibit RB-18?

6 A. Yes.

7 Q. Is it correct that your testimony is Exhibit  
8 RB-7 and that your CV or your resumé is Exhibit RB-8?

9 A. Yes.

10 (Exhibits RB-7 and RB-8 were marked for  
11 identification.)

12 MR. SPIVEY: Your Honor, as part of our  
13 prehearing conference -- prehearing discussions with  
14 the Department counsel, Department counsel declined to  
15 stipulate Ms. Mao's expertise as anything beyond being  
16 an expert property casualty actuary. I am going to  
17 review her credentials now with her with the intention  
18 and expectation of tendering her to you as an expert in  
19 the use of catastrophe models and an expert in  
20 reinsurance for property casualty insurance companies  
21 writing property insurance in the United States.

22 MR. FRIEDMAN: Your Honor, could I just  
23 note one thing as some legal research I did last night,  
24 but I will be voir diring Ms. Mao on that upcoming  
25 proffer. And I did learn that voir dire is not

1 substantive evidence. And so, whether Your Honor  
2 admits Ms. Mao as something other than an actuarial  
3 expert, I will need to reask the questions when we  
4 proceed to her direct, whatever questions I ask in voir  
5 dire, unless there is some way to get around that by  
6 stipulation of the Court. But I hate to be repetitive  
7 there, but that's what the law says.

8 MS. FUNDERBURK: So noted, Mr. Friedman.  
9 Please proceed, Mr. Spivey.

10 MR. SPIVEY: Thank you, Your Honor, but  
11 I want to make clear that we are going to elicit this  
12 evidence from Ms. Mao. We intend it fully as  
13 substantive evidence in this proceeding.

14 MS. FUNDERBURK: Are you arguing,  
15 Mr. Friedman, or stating that your questions are not  
16 substantive evidence in the proceeding?

17 MR. FRIEDMAN: So, the legal research I  
18 did yesterday, they are not doing voir dire when they  
19 question Ms. Mao about her alleged additional  
20 expertise. That is part of the direct.

21 MS. FUNDERBURK: Correct.

22 MR. FRIEDMAN: But when I question her  
23 challenging whether she has that expertise about what  
24 she knows, for instance, about the AIR and RMS models,  
25 from what I read yesterday is pretty well founded that



1 if I still -- if Your Honor grants her that expertise,  
2 but then I still need to repeat those same questions  
3 when I cross her, because the questions that I pose are  
4 in voir dire are not substantive evidence.

5 MS. FUNDERBURK: And you're -- I am  
6 presuming concerned about preserving the record for  
7 later judgments.

8 MR. FRIEDMAN: Yes. And also about not  
9 prolonging, you know, Ms. Mao being on the stand.

10 MS. FUNDERBURK: Okay. Mr. Spivey,  
11 please proceed.

12 MR. SPIVEY: Thank you, Your Honor.

13 Q. Ms. Mao, how long have you been employed with  
14 Aon?

15 A. A little over six years. I joined Aon in  
16 September 2018.

17 Q. Prior to being employed with Aon, is it  
18 correct that you were employed with State Farm  
19 Insurance Companies?

20 A. Correct. I work at State Farm Insurance  
21 Company from January 2001 through September 2018 for  
22 over 17 years.

23 Q. If you would, please, turn in the binder  
24 there to the Exhibit RB-8. And that is -- well, we  
25 will let you identify when you get there.

1 A. Yes, I am there.

2 Q. Is it correct that that is your CV or your  
3 resumé?

4 A. Yes, yes.

5 Q. And you just testified that you began in --  
6 with State Farm in, I think you said, 2001.

7 Beginning in February of 2005, what was your  
8 role at State Farm?

9 A. I was -- I managed State Farm's catastrophe  
10 modeling function. I was responsible for State Farm's  
11 use of catastrophe models in all insurance operations,  
12 from pricing, ratemaking, to underwriting to rating  
13 agency reporting, enterprise risk management claims,  
14 for all State Farm's insurance functions using cat  
15 models.

16 Q. How long did you serve State Farm in that  
17 role?

18 A. Since February 2005.

19 Q. And until when?

20 A. Until September 2018 when I left State Farm.

21 Q. Now, there on your CV, for that period of  
22 February 2005 through September of 2018, you showed,  
23 what I count as, 13 bullet points describing your major  
24 responsibilities in that role, correct?

25 A. Correct.

1 Q. Now, in that first bullet point, it starts  
2 out, "Manage State Farm's catastrophe modeling unit."  
3 Could you describe what that responsibility entailed?

4 A. Sure. I started by a one-person shop in  
5 February 2015. Then, at the beginning, I run all of  
6 the models, I prepare data, and I run through the  
7 model, generate the output, and work with pricing  
8 actuaries to build that into the rate. Later I hired a  
9 team, and I dedicate some responsibilities to my team,  
10 and I managed the work flow, and I also managed the  
11 vendor relationship, including AIR, RMS, and AquaCAT,  
12 at the time, and also another vendor called ARA. It's  
13 a North Carolina underwriting firm.

14 Q. But in that process or that role of managing  
15 the catastrophe modeling unit, did you literally run  
16 the models?

17 A. Yes. As the first couple years, I run  
18 models, I prepared exposure data, input into the model.  
19 I pull the result out of the model, and compiled the  
20 result. Yes, I run models for the first few years of  
21 my career.

22 Q. And, then, after that first few years, were  
23 you still responsible for the running of those models  
24 by those working beneath you in -- on your team?

25 A. Yes. I sign-off all the model results out of

1 my team, that's correct.

2 Q. What models did you work with in your role  
3 there at State Farm?

4 A. Yes. State Farm is a multimodel user, so I  
5 have experience with AIR. It's now called Verisk  
6 model. RMS model is now called Moody's model, and the  
7 AquaCAT model, that's a third -- that's a model has a  
8 third in the marketplace. It's now called CoreLogic  
9 model. And also, I also established the relationship  
10 with ARA model. It is -- stand for Applied Research  
11 Associate. It is engineering firm developed model that  
12 based in North Carolina.

13 Q. So, just to make it clear for the hearing  
14 officer, in this case we are talking about two models,  
15 the AIR model and RMS model, correct?

16 A. Correct.

17 Q. But there are other models in the  
18 marketplace, right?

19 A. Yes.

20 Q. And is it correct that the AIR and RMS models  
21 are the more dominantly used models, or how would you  
22 characterize that?

23 A. Yes. AIR and RMS models are leaders in the  
24 catastrophe modeling field, and they are widely used by  
25 reinsurance companies and the insurance companies to

1 set their rate.

2 Q. Turning, again, to your CV in Exhibit RB-8,  
3 the third bullet there said that you "provide actuarial  
4 opinions on State Farm's use of catastrophe models,  
5 oversee the due diligence and model validation work to  
6 ensure catastrophe modeling practices at State Farm  
7 meet the actuarial standards and comply with laws and  
8 regulatory requirements."

9 Did I read that correctly?

10 A. Correct. Because the models are used for  
11 rate filings and as actuary, we are bound by Actuarial  
12 Standard of Practice, and there is ASOP specifically to  
13 use of cat models outside of actuary's expertise. So,  
14 the ASOP 38 outline the series of testing actuarial, as  
15 professions, have to perform before use of the model  
16 for rate filings. And at State Farm I established the  
17 framework for ASOP 38 compliance, and I developed the  
18 documentation for ASOP 38's compliance used for State  
19 Farm's refiling in different jurisdictions.

20 Q. All right. Looking down to the fifth bullet  
21 there, is it correct that your responsibilities at  
22 State Farm during the period we are talking about, in  
23 the role you described, including assisting in  
24 determining the reinsurance needs of State Farm and  
25 determining how to satisfy those needs?

1           A.       Correct. My team performed the model runs  
2 for State Farm and determining those P&Ls, TVaRs, and  
3 that based on State Farm's risk appetite and the risk  
4 tolerance, used that information to structure State  
5 Farm's reinsurance purchasing decision.

6           Q.       Now, without reading through all 13 bullet  
7 items, Ms. Mao, is it correct to say that your  
8 responsibilities as catastrophe modeling manager for  
9 State Farm, as set out and summarized in those 13  
10 bullet points, involved virtually all aspects of  
11 working with multiple catastrophe models for the  
12 purposes of determining modeled hurricane losses and  
13 for the purposes of determining reinsurance needs and  
14 reinsurance costs and satisfying those reinsurance  
15 needs?

16          A.       That's correct.

17          Q.       Ms. Mao, while you were employed in this role  
18 at State Farm, did you have occasion to work with the  
19 Florida Hurricane Commission?

20          A.       Yes. I was appointed by Florida Chief  
21 Financial Officer Jeff Atwater to serve on Florida  
22 Commission on Hurricane Loss Projection Methodology,  
23 it's also a/k/a Florida Modeling Commission, as the  
24 industry actuary. Yeah. I served on the Commission  
25 since January 2015 through September 2018.

1 Q. Would you please describe generally, and even  
2 more specifically as you think necessary, please  
3 describe what the Florida Hurricane Commission is and  
4 what it does.

5 A. Sure. Florida Hurricane Commission was  
6 established in 1995 legislative session. So, the  
7 purpose of the Commission is to conduct independent  
8 review of actuarial methodology and catastrophe models  
9 to determine the accuracy and the reliability to be  
10 used for Florida rate filing.

11 (Exhibit 29 was marked for  
12 identification.)

13 MR. SPIVEY: Your Honor, I have marked,  
14 as Exhibit RB-29, a document that I want to show  
15 Ms. Mao, and I will ask her a few questions about it.  
16 I have provided copies to counsel, and I think we have  
17 a copy for you.

18 MS. FUNDERBURK: I do.

19 Q. Ms. Mao, do you have a copy of RB-29? All  
20 right. Let me get you one.

21 A. I don't have. I don't believe so.

22 Q. I have another.

23 A. Okay.

24 MR. SPIVEY: May I approach?

25 MS. FUNDERBURK: Please do.

1 THE WITNESS: Thank you.

2 Q. Ms. Mao, do you now have before you an  
3 exhibit marked RB-29?

4 A. Uh-huh.

5 Q. You will have to speak up.

6 A. Sure. Yes.

7 Q. Is it correct that the -- I think,  
8 effectively, three pages that are together here as  
9 Exhibit RB-29 --

10 A. Yes.

11 Q. -- are an excerpt from the website of the  
12 Florida Hurricane Commission?

13 A. Yes.

14 Q. Looking at the first page, is the title at  
15 the top of the page, is that the formal name for what  
16 I'm referring to as the Florida Hurricane Commission?

17 A. Yes, correct. Florida Commission on  
18 Hurricane Loss Projection Methodology is the formal  
19 name of Florida modeling commission.

20 Q. What do these pages show?

21 A. These pages, the first pages shows the  
22 background and the introduction of Florida Hurricane  
23 Commission, and the next page describes the structure  
24 and the membership of the Florida Hurricane Commission.

25 Q. All right. Just for the sake of tracking



1 along, if we look at the first page --

2 A. Uh-huh.

3 Q. -- and realizing that this is a printout from  
4 a website, on the right-hand side, do you see several  
5 boxes there? One says "membership," one says  
6 "structure," "meeting calendar," "subscribe to  
7 updates." Do you see those?

8 A. Yes, I see those.

9 Q. Is it correct that if you were to click on  
10 one that says "structure," it takes you to what is  
11 attached as the second page?

12 A. Correct.

13 Q. And is it further correct that this is --  
14 basically, the first two pages of what is at that part  
15 of the website, there is more behind it, but this sets  
16 out the membership of the Commission, correct?

17 A. Correct. And I also want to mention, these  
18 two pages are from Florida Commission's report of  
19 activities. Because when you see there is a page  
20 number below this, that means this is page 22 of the  
21 Florida Commission's report of activity.

22 Q. Thank you.

23 All right. Looking at the second page there.

24 A. Uh-huh.

25 Q. Is it correct that there are 12 members of

1 the Florida Commission?

2 A. That's correct.

3 Q. Is it correct that what we have before us as  
4 a second page of Exhibit RB-29 is describing the  
5 required expertise or qualifications of each of those  
6 12 members?

7 A. Correct.

8 Q. Which of the items shown here describes the  
9 role that you testified to a few moments ago that you  
10 served for the Florida Commission?

11 A. I am the number 7A on the second page. It  
12 says number 7 defined -- "There is five members  
13 appointed by the chief financial officer as follows: A  
14 is an actuary who is employed full-time by a property  
15 and casualty insurer, which was responsible for at  
16 least 1 percent of the aggregate statewide direct  
17 written premium for homeowner's insurance in the  
18 calendar year preceding member's appointment to the  
19 Commission."

20 Q. And at the time, as you have testified, you  
21 were employed with State Farm and that -- that  
22 property -- they were a property casualty insurer that  
23 satisfied that set of requirements, correct?

24 A. That's correct.

25 Q. Now, do I understand correctly that among the

1 members of the Florida commission, there is included  
2 representatives of the Florida regulatory body that  
3 oversees property insurance rates in Florida?

4 A. That's correct. The number 6 of the  
5 membership describes employee from Florida office --  
6 Department of the Financial Service, Office of  
7 Insurance Regulation. Yes, the regulator is on the  
8 committee as well.

9 Q. And is it correct that the membership also  
10 includes experts in statistics, computer system design,  
11 and meteorology, and also a licensed professional  
12 structural engineer?

13 A. That's correct. The membership under number  
14 7B through E and number 8 are those experts you just  
15 mentioned.

16 MR. FRIEDMAN: Your Honor, if I could  
17 ask one question, I don't want to interrupt the flow.

18 MS. FUNDERBURK: Let's reserve your  
19 questions unless --

20 MR. FRIEDMAN: I guess it, then, would  
21 be an objection.

22 MS. FUNDERBURK: You can raise an  
23 objection, make an objection, but we are going to allow  
24 Mr. Spivey to finish doing his examination. Do you  
25 have an objection?

1 MR. FRIEDMAN: I do.

2 MS. FUNDERBURK: State your grounds.

3 MR. FRIEDMAN: That these are beyond --  
4 well beyond the scope of her actual prefiled expert  
5 testimony, and that if Mr. -- if that is her testimony  
6 and --

7 MS. FUNDERBURK: Mr. Friedman, we need  
8 you to turn your mic on.

9 MR. FRIEDMAN: My objection is that all  
10 that he's going into right now is well beyond the four  
11 corners of Ms. Mao's prefiled testimony and should be  
12 better -- I'm talking about the Florida Commission  
13 specific issue -- would be better reserved for  
14 rebuttal.

15 But, that said, I just -- if he is going  
16 to be allowed to talk about these things that are well  
17 beyond the four corners of her filed testimony on  
18 direct, I'd like the same consideration for me when I  
19 am doing direct of my experts.

20 MR. SPIVEY: Your Honor, I would simply  
21 respond that we are going through Mrs. Mao's CV, which  
22 is in the record as Exhibit RB-8, and her prefiled  
23 testimony mentions that she served on this commission  
24 as part of her credentials. I don't see how this is  
25 possibly outside the scope of what's in this filing.

1 MS. FUNDERBURK: And, at this point, we  
2 are -- or you are conducting your examination to  
3 request that she be deemed an expert for this matter  
4 because the parties were not able to stipulate as to  
5 whether or not she was an expert in the matters that  
6 you would like her designated as an expert. And I am  
7 going to allow that testimony. Your objection is  
8 overruled.

9 MR. FRIEDMAN: Thank you, Your Honor.

10 Q. So, Ms. Mao, we were -- you were just  
11 testifying about, you know, who various members of the  
12 Commission were, you know, what the Commission  
13 membership includes. Is it correct that in your  
14 service on the Florida Hurricane Commission, you worked  
15 with all of these people in reviewing various  
16 catastrophe models?

17 A. That's correct.

18 Q. Are there various teams of people who work  
19 with and provide reports to the Florida Commission in  
20 connection with the Commission's work in reviewing  
21 catastrophe models?

22 A. Correct. So, Florida Commission also hired a  
23 professional team that composed of meteorologists,  
24 actuaries, statistics expert, structural engineer, and  
25 the computer scientist. The professional team go

1 on-site for between three to five days during each  
2 review cycle to investigate the model, evaluate the  
3 input, output, and the methodology assumptions of the  
4 model, and they draft a report. As a Commission  
5 member, we read the report and then cast our vote based  
6 on their report.

7 Q. So, do I understand, then, that these  
8 professional teams are essentially working at the  
9 direction of or to assist the actual hurricane  
10 commission members in their role in their job of  
11 reviewing the catastrophe models?

12 A. That's correct.

13 Q. And did you, as a member of the Florida  
14 Commission, receive and review the reports provided by  
15 those professional teams?

16 A. Yes. I received those reports and reviewed  
17 those reports.

18 Q. Does the Florida Commission, with all of the  
19 experts actually comprising the membership of the  
20 Commission, and with the assistance of those  
21 professional teams you've described, does it review the  
22 meteorological, wind engineering, damageability,  
23 claims, statistical, computer programming, economic,  
24 and other aspects of the catastrophe models in great  
25 detail?

1 A. Yes, we do.

2 Q. How long did you serve on the Florida  
3 Commission?

4 A. I served from January 2005 through September  
5 2018 -- January 2015 through September 2018.

6 Q. Why did you stop serving on the Commission?

7 A. I stopped serving because I joined Aon. I  
8 left the insurance, the insurance -- primary insurance  
9 company and that Aon doesn't write homeowner insurance  
10 in Florida, therefore, I can no longer serve on the  
11 Florida Commission.

12 Q. So, you were there as an actuary from a  
13 property casualty company writing insurance, and once  
14 you left State Farm, you no longer fit that description  
15 for membership?

16 A. That's correct.

17 Q. During the period you served on the  
18 Commission, how many cycles of model review and  
19 certification did you participate in?

20 A. I participated two cycles of hurricane  
21 review, that's -- so, I voted on models as being  
22 certified in 2015 and the 2017, all hurricane models.  
23 And also during the period, I was part of the working  
24 group that established Florida flood model standards.

25 Q. Would you describe for the hearing officer

1 what a cycle of review refers to, what it means in the  
2 context of reviewing the catastrophe models?

3 A. Sure. The reviewing of catastrophe models is  
4 quite a long process. It -- based on -- it lasts about  
5 total nine months. So because of the resource into  
6 those models, so it's not an annual review process.  
7 It's reviewed by the Commission every odd year. So,  
8 it's easy -- for hurricane vendors, they develop their  
9 hurricane model trying to fit into the Florida Modeling  
10 Commission review. So, this is also the -- now most  
11 vendors they release their major hurricane models every  
12 odd year during the summer, right after their model is  
13 certified by the Florida Commission.

14 However, the review process started long  
15 before that because of -- the deadline for submission  
16 is November 1st of the prior year, every even year.  
17 So, when every vendor submitted their model, then the  
18 Commission or pro team will review their submission and  
19 schedule the on-site audit visit. Then, after all of  
20 the standards are verified by the experts in the summer  
21 of the odd year, those models will be voted by  
22 Commission to get certification.

23 Q. So, as part of your work with the Florida  
24 Commission, did you visit the model vendors yourself?

25 A. Yes. I visited AIR and RMS vendors in 2017



1 review. I spent three days in each vendor's site and  
2 observed their audit meetings.

3 Q. And just to state the obvious, I guess, in  
4 this context, when you visited there, the purpose was  
5 to review the model that they were proposing to the  
6 Florida Commission should be approved for use, correct?

7 A. Correct.

8 Q. So, then, was it part of the work of the  
9 Florida Commission, while you served on that  
10 Commission, to evaluate the accuracy and reliability of  
11 the catastrophe models?

12 A. That's correct.

13 Q. Ms. Mao, let's turn back to your resumé,  
14 Exhibit RB-8. I believe you've already testified that  
15 you left State Farm to be employed by Aon in -- was it  
16 September 2018?

17 A. Correct. Correct.

18 Q. And what was your role initially with Aon  
19 when you joined Aon?

20 A. My role initially was managing director and  
21 actuary at Aon's Reinsurance Solutions team.

22 Q. In looking at your resumé, is it correct then  
23 that in April 2021 you became senior managing director  
24 actuary for Aon Reinsurance Solutions?

25 A. That's correct.

1 Q. And is that still your title there?

2 A. Yes.

3 Q. On your CV there, is it correct that you set  
4 out eight bullet points describing your major  
5 responsibilities in your role there, first as managing  
6 director, and then later and currently as senior  
7 managing director for an Aon Reinsurance Solutions?

8 A. That's correct.

9 Q. Is it correct that your duties -- I'm sorry,  
10 let me start over.

11 Is it correct that your full-time work with  
12 Aon Reinsurance Solutions in the roles we have just  
13 discussed, involves working with catastrophe models in  
14 connection with the ratemaking and reinsurance needs of  
15 Aon's clients?

16 A. That's correct.

17 Q. Ms. Mao, I see on your CV that you have the  
18 designation Certified Catastrophe Risk Management  
19 Professional; is that correct?

20 A. That's correct.

21 Q. And is it correct that the initials for that  
22 designation are CCRMP?

23 A. That's correct.

24 Q. When did you get that designation?

25 A. It's late 2019 when the Institute of Casualty

1 Actuarial Society start to issue that license. I was  
2 one of the first who got it.

3 Q. Well, would you please describe what that  
4 designation recognizes and reflects?

5 A. That designation is designed for people who  
6 work in the catastrophe management field that conduct  
7 catastrophe modeling work, use model output to perform  
8 risk transfer, risk management, and the different --  
9 related to the catastrophe of the organization.

10 Q. And what organization grants that  
11 designation?

12 A. That specific designation is jointly  
13 sponsored by ICAS, AKA, Institute of Casualty Actuarial  
14 Society and the ISCM is International Society of  
15 Catastrophe Management.

16 Q. And I believe you just mentioned that you  
17 were one of the first recipients of that designation?

18 A. That's correct.

19 Q. Do you know approximately how many people  
20 hold that designation today?

21 A. I estimate there is about 100 people today  
22 hold that designation.

23 Q. Let's go back for a moment to the time that  
24 you were working with State Farm managing their  
25 catastrophe modeling unit. Is it correct that you and

1 your team, during that time, ran multiple catastrophe  
2 models in connection with rate filings at State Farm  
3 for the purposes of generating modeled hurricane  
4 losses, and determining the company's reinsurance needs  
5 and reinsurance costs?

6 A. That's correct.

7 Q. Could you give us some estimate of how many  
8 times you and your team ran catastrophe models for  
9 those purposes while you were at State Farm?

10 A. So, if I think about on a daily basis, I come  
11 up with very conservative estimate. If we run two  
12 model runs every day, then I count 500 per year. I was  
13 in the role for 13 years. So, it's well beyond 6,000  
14 model runs. It could be larger than that.

15 Q. In your role now at Aon Reinsurance  
16 Solutions, have you worked with the team there at Aon  
17 that is actually developing a catastrophe model?

18 A. Yes. Aon has our in-house catastrophe model  
19 called Impact Forecasting. I am Impact Forecasting's  
20 consulting actuary and their signatory actuary for  
21 their Florida submission.

22 Q. During the past six years that you've been  
23 employed at Aon, as managing director and then senior  
24 managing director for Aon Reinsurance Solutions, is it  
25 correct that you and your team run multiple catastrophe

1 models for clients of Aon for the purposes of  
2 determining their reinsurance needs and satisfying  
3 those reinsurance needs?

4 A. That's correct.

5 Q. Is it correct that you also run multiple  
6 catastrophe models for Aon clients for their rate  
7 filing purposes?

8 A. That's correct.

9 Q. Ms. Mao, do you have an estimate of the  
10 percentage of the U.S. property exposure represented by  
11 the clients that you work for and work with for the  
12 purposes we just described at Aon?

13 A. So, my estimate is between 55 to 60 percent  
14 of the U.S. homeowner market. I say that because Aon  
15 work with top -- seven out of the top ten homeowner  
16 carriers in the United States. So, annually we model  
17 all their exposures. And, in addition to that, Aon  
18 also work with two large mortgage vendors, and then we  
19 also conduct modeling for those mortgage vendors. So,  
20 those combined represent a large percentage of the U.S.  
21 property market.

22 MR. SPIVEY: Your Honor, with that, we  
23 tender Ms. Minchong Mao as an expert in the application  
24 and use of catastrophe models for property insurance in  
25 the United States and as an expert in reinsurance for

1 property casualty companies writing property insurance  
2 in the United States.

3 MS. FUNDERBURK: At this point, I will  
4 allow Mr. Friedman to question Ms. Mao.

5 Mr. Friedman, go ahead.

6 MR. FRIEDMAN: I do need to ask opposing  
7 counsel some questions about his proffer of expertise.  
8 Or need to figure out, and that is whether she is being  
9 offered, I guess, first of all, as an expert -- an  
10 expert in the two models of -- two versions of AIR  
11 models she ran in North Carolina and the two models of  
12 RMS models she ran in North Carolina.

13 MR. SPIVEY: Your Honor, I am offering  
14 Ms. Mao for the purpose that I described a moment ago.  
15 If what Mr. Friedman is asking is whether we need to  
16 explore Ms. Mao's specific expertise with the current  
17 models, we can certainly do that or he's welcome to do  
18 that. But, as I said, I'm offering her as an expert in  
19 the application and use of catastrophe models for  
20 property insurance in the United States, and as an  
21 expert in reinsurance for property casualty companies  
22 writing property insurance in the United States.

23 MR. FRIEDMAN: However opposing counsel  
24 or Your Honor would like to handle it, I do have  
25 additional questions about the parameters of her

1 proffered expertise, and I will just go over those now,  
2 if it's okay. And if that prompts opposing counsel to  
3 need to do more direct of her, I certainly understand.  
4 But I just -- in order to know what questions to ask of  
5 her about her expertise in modeling in the entire  
6 United States, I need to know whether she is  
7 specifically being offered as an expert in -- for  
8 particular purposes in North Carolina.

9 MS. FUNDERBURK: Is that something you  
10 feel you can respond to, Mr. Spivey?

11 MR. SPIVEY: May I have just a moment?

12 MS. FUNDERBURK: Sure.

13 MR. SPIVEY: Your Honor, it's my belief,  
14 my understanding, that our proffer covers Ms. Mao's  
15 expertise in the use of these models, and I'm not sure  
16 that we need to do anything beyond that. But certainly  
17 Mr. Friedman can ask the questions of the witness as he  
18 wishes.

19 MR. FRIEDMAN: That's fine, Your Honor.

20 MS. FUNDERBURK: Mr. Friedman, please  
21 proceed with your questioning of the witness.

22 VOIR DIRE EXAMINATION

23 BY MR. FRIEDMAN:

24 Q. Ms. Mao, do you consider yourself to have  
25 expertise in the RMS historical model, specifically the

1 version that you ran for this filing?

2 A. I believe I have expertise for RMS models  
3 used for this rate filing. This --

4 Q. So that -- excuse me. Please go on.

5 A. Are you saying specifically historical view  
6 of the model?

7 Q. I was asking about historical, but I also ask  
8 the same about medium-term.

9 A. I believe I have the expertise.

10 Q. And do you have an expertise in the modeling  
11 results of those two RMS models specifically as to how  
12 they estimate loss in North Carolina?

13 A. So, can you define "expertise" because I have  
14 knowledge about those models. I understand how those  
15 results are generated. I just want to better  
16 understand what you mean, "expertise."

17 Q. Expertise such that the Court can give  
18 particular consideration and extra weight to your  
19 testimony.

20 A. The last sentence is?

21 Q. Yes, ma'am. Extra weight to your testimony.

22 So, very generally -- and please tell me, if  
23 this is not your understanding of expert testimony, but  
24 very generally there are -- there can be a certain  
25 weight that a judge can give to an expert witness --



1 A. Uh-huh.

2 Q. -- that may be above what the judge would  
3 give to a witness who was not an expert.

4 A. Okay. Understood. Thank you.

5 Q. So, with that, I guess, do you consider  
6 yourself to have expertise as to those two RMS models  
7 as specifically applied in North Carolina, particularly  
8 with regard to the losses?

9 A. I evaluated those models generally, and my  
10 evaluation also included North Carolina results.

11 Q. So, I was asking, then, about the losses  
12 specifically, but you've used the models for, depending  
13 on how you look at it, two or three other purposes.  
14 So, I will ask those questions.

15 A. Yes.

16 Q. You've used both the RMS and the AIR models  
17 to calculate the CAR; is that correct?

18 A. Correct.

19 Q. Okay. Let me just -- I will go ahead and  
20 start including some questions about AIR models and the  
21 RMS models so that we can make it quicker.

22 A. Sure.

23 Q. So, as to the two RMS models and the two AIR  
24 models, are you an expert in the results that those  
25 models produce as far as CAR?

1 A. Yes.

2 Q. Are you -- do you consider yourself an expert  
3 in the results that those models produce as far as CAR  
4 in North Carolina?

5 A. Yes.

6 Q. Do you consider yourself an expert in the  
7 results that those combined four models produce as far  
8 as the net cost of reinsurance in North Carolina?

9 A. So, when you say "combined four models," I  
10 think it's a little blurry, and I think we need a lot  
11 of clarification on that topic.

12 Q. Sure. So, you consider yourself an expert in  
13 the results that RMS historical produces regarding the  
14 net cost of reinsurance in North Carolina?

15 A. Yes.

16 Q. Do you consider yourself an expert in the  
17 results that the RMS medium-term -- let me back up for  
18 a second. I'm sorry.

19 So you only use the RMS medium-term and the  
20 AIR WSST for the CAR; am I correct?

21 A. Correct, yes.

22 Q. So, that helps me. So, for -- do you  
23 consider yourself an expert in the medium-term, the RMS  
24 medium-term results, for the net cost of reinsurance in  
25 North Carolina?

1           A.     I want to clarify. The net cost of  
2 reinsurance for North Carolina is calculated by  
3 subtracting ceded AAL from reinsurance premium. So,  
4 the ceded AAL is determined by the historical view, and  
5 the premium is determined by the medium-term view.

6           Q.     Okay. That's not -- a detail I didn't  
7 understand before.

8                     So, in essence, the estimates of the net cost  
9 of reinsurance that you provided in the filing are the  
10 results of both of the RMS models?

11          A.     That's correct.

12          Q.     And do you consider yourself an expert in the  
13 results that both RMS models produce as far as the net  
14 cost of reinsurance in North Carolina?

15          A.     Yes, I do.

16          Q.     As for the AIR models, are the results for  
17 the net cost of reinsurance based on a combination of  
18 the AIR standard and the AIR WSST?

19          A.     That's correct.

20          Q.     Do you consider yourself an expert in the  
21 results that the two AIR models produce as far as the  
22 net cost of reinsurance in North Carolina?

23          A.     Yes.

24          Q.     Okay. And then going to the demand search  
25 functions of the four models, does -- to determine the

1 demand search functions of RMS, do you look at both  
2 models or only the historical?

3 A. We -- we -- in our model testing, we tested  
4 the demand search on both models and in our -- in our  
5 results for the hurricane -- to determine the hurricane  
6 loss cost, we only run the long-term model. And to  
7 determine the reinsurance, we include the metrics for  
8 the medium-term and we'll search the temperature model.

9 Q. Okay. So, well -- so the demand search  
10 function is also -- affects -- or the demand search  
11 that the RMS historical model includes can affect the  
12 calculation of the net cost of reinsurance?

13 A. Yes. Ceded AAL is part of the net cost of  
14 reinsurance, and the ceded AAL include demand search.

15 Q. And is that the same for the CAR?

16 A. Yes.

17 Q. On RMS for the demand search percentage in  
18 the regular losses, is that demand search process -- or  
19 is that demand search function used only from  
20 historical or from historical and medium term?

21 A. I think it's hard to answer a question. Can  
22 you repeat?

23 Q. Yes, ma'am.

24 So, I believe in descriptions I've read by  
25 the -- actually the introduction to the filing that the

1 Bureau stated that RMS historical and AIR standard were  
2 used for determining the hurricane losses.

3 A. Correct.

4 Q. And there is a percentage of that that is  
5 attributable to the demand search; is that correct?

6 A. Correct.

7 Q. So, were, in any way, the demand search  
8 functions of RMS medium-term used in determining that  
9 percentage of the losses?

10 A. I am -- now you're getting into some trade  
11 secret information of how modeling vendor developed  
12 their demand search.

13 Q. So, you can't ans- -- I have -- I am going to  
14 have a lot more questions about what things are trade  
15 secrets for the modeling companies and not -- when I'm  
16 going through this question of your expertise. But do  
17 you need to consult with --

18 A. Yeah, I need to consult with my attorney on  
19 how to answer that question. I know -- yeah, I need to  
20 figure out how to -- how to protect vendor's trade  
21 secret information.

22 MR. FRIEDMAN: Your Honor, might I  
23 suggest we take a break?

24 Well, I'm trying to think of the most  
25 efficient way to go through this. I am going to have

1 similar questions for the AIR models, and I'm going to  
2 have -- even after I figure out what she believes she  
3 has expertise in, then a whole lot of questions  
4 about -- that I think would be attempting to probe the  
5 things that she thinks she has expertise. I don't know  
6 if that requires some time now or at lunch time for her  
7 to consult with counsel. I will say this, though, that  
8 as far as my own organization, it is easier for me to  
9 have her consult with counsel about the question that's  
10 pending because, otherwise, I will have to put that one  
11 question off to one side and wait until after lunch and  
12 then repose it.

13 MS. FUNDERBURK: Mr. Spivey, would you  
14 like to consult with your witness before we proceed?

15 MR. SPIVEY: Yes, Your Honor. Let me  
16 just note for the record that Ms. Mao is -- throughout  
17 this process has had concerns about being questioned  
18 about matters which she's bound by confidentiality to  
19 the model vendors. And my perception is that's what  
20 she is asking to have a conference about now.

21 MS. FUNDERBURK: How much of a recess  
22 will you need to complete your consultation?

23 MR. SPIVEY: I think this particular  
24 conversation, three to five minutes.

25 MS. FUNDERBURK: We are off the record

1 for five minutes.

2 MR. SPIVEY: Thank you.

3 MS. FUNDERBURK: Thank you.

4 (Recess from 11:08 to 11:15)

5 MS. FUNDERBURK: Thank you, Counsel. We  
6 are back on the record.

7 Ms. Mao, I will remind you that you do  
8 continue to be under oath --

9 THE WITNESS: Okay.

10 MS. FUNDERBURK: -- after the recess.

11 Thank you.

12 THE WITNESS: Okay. Thank you.

13 BY MR. FRIEDMAN:

14 Q. So, Ms. Mao, my question was whether -- we  
15 are specifically on RMS. The RMS historical demand  
16 function, demand search function --

17 A. Uh-huh.

18 Q. -- and the RMS medium-term demand search  
19 function both affected the demand search percentage  
20 that you gave for hurricane losses, not the CAR, not  
21 the net?

22 A. So, for RMS model, I have to explain their  
23 methodology. Because RMS long-term view, historical  
24 view, and the medium-term view, they have the same  
25 event. They differ in the rate, annual rate of those

1 event. Since RMS determines the total demand search  
2 based on the total loss of the event, to the extent  
3 both events are the same in two models, so they tend to  
4 have the same demand search impact.

5 Q. But let me ask you this then. At least in  
6 the data you gave us, the RMS medium-term had  
7 additional losses --

8 A. Uh-huh.

9 Q. -- from the same event than RMS historical  
10 did; is that correct?

11 A. So, which one are you talking about here?

12 Q. So, my understanding that -- again, you used  
13 the RMS medium-term for the CAR --

14 A. Uh-huh.

15 Q. -- the net, and I'm trying to figure out  
16 whether it, too, affected the -- it, too, affected the  
17 demand search calculation in the regular hurricane  
18 losses. In your data --

19 A. Uh-huh.

20 Q. -- the RMS medium-term hurricane losses were  
21 all -- in every instance are higher than the estimated  
22 hurricane -- modeled hurricane losses of RMS  
23 historical; is that correct?

24 A. In this version, that's correct, because RMS  
25 medium-term view, they have some event at higher -- has



1 a higher annual rate. Therefore, even if you have the  
2 same event loss, when you multiply that by a higher  
3 probability, that will result in a higher and average  
4 annual hurricane loss.

5 Q. And as far as actual numbers of events, does  
6 the RMS medium-term predict more modeled hurricanes or  
7 more events than RMS historical?

8 MR. SPIVEY: Objection, Your Honor.  
9 Counsel's questions are going into the actual evidence  
10 of output in this case. I thought we were conducting  
11 voir dire regarding her expertise.

12 MR. FRIEDMAN: Well, Your Honor, that  
13 was -- this is a detail that Ms. Mao just brought up  
14 and asked me what I was -- I mean, I am trying to  
15 discern whether she is an expert in, in this case, the  
16 two versions of RMS. And, in order to do that, I have  
17 to figure out which of the two versions affected what  
18 portion of her calculation, if you will.

19 MR. SPIVEY: Those matters are --

20 MS. FUNDERBURK: And I tend to agree  
21 with Mr. Spivey. That is getting into the substance of  
22 what I would expect her testimony is going to cover  
23 rather than her qualifications to provide that  
24 testimony. And, to that extent, I will sustain the  
25 objection and ask counsel to limit questioning, direct

1 questioning to the particular issue of whether or not  
2 Ms. Mao is an expert in the two areas identified by  
3 Mr. Spivey.

4 MR. FRIEDMAN: All right. Yes, Your  
5 Honor.

6 Q. As to the AIR models, do you consider  
7 yourself an expert in the hurricane loss results from  
8 both of the models?

9 A. Yes.

10 Q. Do you consider yourself, as the AIR models,  
11 an expert in the net calculations of both of the  
12 models?

13 A. Yes. To the extent I use the result, output  
14 of the model, yes.

15 Q. And I guess I should also say, do you  
16 consider yourself an expert in the loss results of each  
17 model in North Carolina?

18 A. Yes.

19 Q. Okay. The same question as to the net cost  
20 of reinsurance?

21 A. Yes.

22 Q. And, then, as to the CAR with both AIR  
23 models, do you consider yourself an expert in their  
24 results as to North Carolina?

25 A. Yes.

1 Q. And as to the net cost of reinsurance, do you  
2 consider yourself an expert in both of the AIR models  
3 as to North Carolina?

4 A. Yes.

5 MR. FRIEDMAN: Okay. Your Honor, I'm  
6 going to go on into, then, the questions I actually  
7 have about the extent of her knowledge.

8 MS. FUNDERBURK: Proceed.

9 Q. Ms. Mao, could you tell me what -- have you  
10 heard the term "components" when referring -- or  
11 "modules" when referring to models?

12 A. Sorry, I couldn't hear clearly. What's the  
13 question? Can you repeat?

14 Q. Are you familiar with the term "modules" in  
15 the context of hurricane models?

16 A. Yes, I am.

17 Q. Could you explain what modules are?

18 A. So, typically, a hurricane model include the  
19 hazard module. The hazard module include the frequency  
20 and the severity of the event. Hurricane frequency is  
21 based on the National Hurricane Center's 1851 through  
22 current historical records, and meteorologists would  
23 examine the data and develop the frequency and the  
24 frequency of the landfall hurricanes. And the severity  
25 of the event includes a sustained -- hurricane

1 sustained wind, the wind speed at the landfall, and how  
2 the hurricanes pass inland, and how hurricanes decay as  
3 they pass inland. This is the first module we call  
4 hazard module.

5           Second module is called vulnerability. It  
6 could also be called engineering module. In that  
7 module the scientists, typically the structure and the  
8 civil engineers developed the damageability of certain  
9 building -- based on the building characteristics, and  
10 they are secondary modifiers in determining how  
11 buildings perform under certain wind, and also consider  
12 other factors like debris and a tree falling, things  
13 like that. This is the second module, damageability  
14 function calculate the ground-up loss, that is how  
15 building was damaged by certain speed of wind.

16           The last module is called the financial  
17 module. The financial module is developed by people  
18 with insurance background. So, that module would  
19 consider the insurance company's exposure and how the  
20 policy terms, such as the limit, the deductible  
21 interact with the ground-up loss, and then calculate  
22 the gross loss. Gross loss is what the insurance  
23 company would suffer from the hurricane event.

24           Q. Do you consider yourself an expert in all  
25 three of those models as to both of the RMS models and

1 both of the AIR models you used?

2 A. This is not -- I am not supposed to be the  
3 expert of the meteorology or engineering. I am a model  
4 user. My responsibility is to understand how model  
5 functions, understand the model result makes a logical  
6 relationship and that the model result is reasonable,  
7 and I am not supposed to be the expert for engineering  
8 module and the meteorology component.

9 Q. Okay. Both the meteorological model and the  
10 engineering -- excuse me -- module and the engineering  
11 module affect the ultimate numbers that the model puts  
12 out; is that correct?

13 A. That's correct.

14 Q. And that is because, one, I guess the  
15 meteorological assumptions affect frequency and  
16 severity of the hurricane itself; is that fair?

17 A. That's correct.

18 Q. And then engineering, the engineering models,  
19 those details affect the extent of damage, in this  
20 case, to homes?

21 A. That's correct.

22 Q. Okay. So, you're not offering yourself as an  
23 expert in either the affect -- the engineering module  
24 or the meteorological module?

25 MR. SPIVEY: Object. Ms. Mao is not

1 offering herself as anything. The Rate Bureau has  
2 tendered her as an expert in the matters that we  
3 described, the application and the use of these models  
4 for the purpose of determining model losses and for the  
5 purposes of reinsurance. That's not what he just asked  
6 about.

7 MS. FUNDERBURK: And, for clarification,  
8 it's the Rate Bureau tendering as an expert, and you  
9 have not tendered her as an expert in either of the  
10 areas referenced, correct?

11 MR. FRIEDMAN: Can I address that, Your  
12 Honor? She has said she is an expert in the modeled  
13 results.

14 MR. SPIVEY: That is not what we  
15 tendered her --

16 MR. FRIEDMAN: Is that not what -- okay.

17 MR. SPIVEY: We tendered her as an  
18 expert in the application and use of catastrophe models  
19 for property insurance, and as an expert in reinsurance  
20 for casualty companies writing property insurance.

21 MR. FRIEDMAN: So, by tendering her as  
22 an expert in the use of models, are you also meaning to  
23 tender her as an expert in the results of her use of  
24 the models in this case?

25 MR. SPIVEY: I'm not sure I follow what

1 you're asking because she has used the models, and  
2 they've been used in this filing as is presented in  
3 this filing, which uses the model. The results are  
4 whatever the model results are -- generate.

5 MS. FUNDERBURK: Counsel, let's focus on  
6 the issue that is before the Court, which is whether or  
7 not Ms. Mao is an expert in catastrophic filing for  
8 U.S., and an expert in reinsurance. We will determine  
9 that issue, and if she is accepted as an expert,  
10 Counsel, you can reserve any objections to her  
11 potentially testifying outside the scope of her  
12 expertise should she be accepted as an expert.

13 MR. FRIEDMAN: Okay. I guess the one  
14 question I have, Your Honor, is that -- I guess, I'm  
15 maybe misunderstanding -- not understanding the extent  
16 to which you are offering her as an expert versus the  
17 expertise she has, particularly with regard to North  
18 Carolina. She has said she considers herself an expert  
19 in all four models, not just nationally but their  
20 results in North Carolina in particular. And I'd like  
21 to know whether she's being tendered as something more  
22 than just a national expert.

23 MR. SPIVEY: Our proffer here is that  
24 she's an expert in using these models. We haven't even  
25 gotten to my question to her about how she's used that

1 expertise in this case. But, yes, the use of the  
2 models includes use of them in North Carolina.

3 MR. FRIEDMAN: Okay.

4 MS. FUNDERBURK: Mr. Friedman, please  
5 continue with your examination.

6 Q. Ms. Mao, are you -- do you consider yourself  
7 an expert in the use of the -- well, you're being  
8 offered as an expert in the use of the models in North  
9 Carolina, correct?

10 A. In the use of the -- for the United States,  
11 including North Carolina.

12 Q. Okay. Including North Carolina, yes, ma'am.  
13 I understand.

14 And does the use of those include the three  
15 modules that you described, financial, engineering, and  
16 meteorological?

17 A. Any catastrophe model output involves those  
18 three modules.

19 MR. FRIEDMAN: Then, Your Honor, I guess  
20 I still think the appropriate time to get into her  
21 understanding of all three modules is now because she's  
22 just testified that using the models necessarily  
23 includes all three of the subsets of data within the  
24 models.

25 MS. FUNDERBURK: And to what extent --



1 and I think Mr. Spivey may have raised this earlier,  
2 and I have the same concern. To what extent is that  
3 line of questioning moving forward into testimony that  
4 will be expected at a later point in the hearing versus  
5 at this point in the hearing we are reviewing Ms. Mao's  
6 qualifications to determine if she is to be deemed an  
7 expert by the Court -- I'm sorry, allowed to be  
8 tendered as an expert by the Court.

9 MR. FRIEDMAN: Certainly I am concerned  
10 that she is given the extra consideration as an expert,  
11 particularly in the engineering module and the  
12 meteorological models. So, I'm just -- what I am  
13 trying to guard against is that she -- when she is --  
14 if she is ruled to be an expert in the use of models in  
15 North Carolina, that that automatically gives her some  
16 expertise in, to some extent, the financial model but  
17 mostly in the engineering and meteorological module.

18 MS. FUNDERBURK: Do you have any further  
19 argument for the Court, Mr. Spivey?

20 MR. SPIVEY: I guess I am still  
21 concerned that the questions here are going afield of  
22 what we are proffering Ms. Mao as an expert in. As we  
23 have already obtained testimony from her about her vast  
24 experience in using and running these models over many  
25 years of her career now, she has expertise in applying

1 and using these models.

2                   It sounds to me like Mr. Friedman is  
3 getting into questions about how the modules within  
4 each of these models actually work, how they are  
5 developed by the experts who built the models and  
6 things like that. I'm not suggesting that Ms. Mao  
7 doesn't have that expertise, but that's -- we are not  
8 offering her as the person who built the model. We're  
9 offering her as an expert in using these models.

10                   MR. FRIEDMAN: So, to the extent that  
11 those two modules particularly -- the engineering --

12                   MS. FUNDERBURK: Please. Thank you.  
13 Speak up --

14                   MR. FRIEDMAN: To the extent that -- I  
15 mean, she's already testified that she is not the  
16 person who is designated as the expert for two out of  
17 the three modules that are the core of the hurricane --  
18 the use of the models that she's talking about today  
19 and is saying she's an expert in. She said she's not  
20 the designated expert for two-thirds of the results of  
21 those models. And I think I am very concerned about  
22 her being given some deference as to two-thirds of the  
23 use of the models without me having to probe, being  
24 able to probe, in advance of that, the extent of her  
25 knowledge of those two out of the three models --

1 modul es.

2 MR. SPIVEY: I would respond --

3 MS. FUNDERBURK: Mr. Spi vey.

4 MR. SPIVEY: -- Your Honor, that  
5 we're -- I'm not even sure I'm following the idea that  
6 she is an expert in one-third versus two-thirds or  
7 whatever. We are proffering Ms. Mao as an expert in  
8 applying and using catastrophe models. And we all know  
9 that that's an issue in this case.

10 Again, to try to parlay that into, oh,  
11 she's not an expert in some piece of the results of the  
12 model, I'm not even sure I understand where that's  
13 going, but the model -- when you run the models, they  
14 generate results. Ms. Mao is an expert in applying and  
15 using these models, and the results are being presented  
16 here as whatever the results end up being.

17 MS. FUNDERBURK: Thank you.

18 MR. SPIVEY: So, trying to get into how  
19 the models are developed, built, and how these modules  
20 are determined, I don't see that that's where we need  
21 to go in terms of determining whether she's qualified  
22 as we've proffered her.

23 MS. FUNDERBURK: Thank you, Counsel.

24 Mr. Friedman, do you have a question --  
25 continued questions for Ms. Mao outside of how the

1 models themselves are built, regarding her background  
2 and qualifications?

3 MR. FRIEDMAN: So, if I could ask --  
4 and, Your Honor, is -- when you say "how the models are  
5 built," does that mean also the results? I'm just  
6 trying to figure out because certainly I would have  
7 more questions with regard to those two modules in  
8 particular if -- it's one thing for her to be an expert  
9 in how -- not to be an expert in how the models are  
10 built, but what I'm interested in is more than that,  
11 whether she's an expert in the results given that the  
12 affects those two modules on the results. If this is  
13 too obtuse, I can save it for my cross.

14 MS. FUNDERBURK: I am prepared at this  
15 time to accept Ms. Mao as an expert in catastrophic  
16 modeling for the U.S. and an expert in reinsurance.

17 Mr. Friedman, I understand that you may  
18 have objections at a later point to the extent to which  
19 her -- her testimony may or may not exceed that  
20 designation of her as an expert witness.

21 But, at this time, Counsel, I do accept  
22 your tender of Ms. Mao as an expert in the two areas,  
23 and specifically those two areas that you have  
24 identified. Thank you.

25 Please proceed.

1 MR. SPIVEY: Thank you.

2 CONTINUED DIRECT EXAMINATION

3 BY MR. SPIVEY:

4 Q. Ms. Mao, has the work that you performed on  
5 behalf of the Rate Bureau, as that work is presented in  
6 your testimony and exhibits contained in the Rate  
7 Bureau's 2024 homeowners' insurance rate filing, has  
8 that work been performed based on and utilizing your  
9 expertise in the application and use of the catastrophe  
10 models for property insurance in the United States and  
11 your expertise in reinsurance for property casualty  
12 insurance companies writing property insurance in the  
13 United States?

14 A. Yes.

15 Q. Ms. Mao, do you have a copy of the Notice of  
16 Hearing there in front of you?

17 A. I don't believe so.

18 MR. SPIVEY: Can we have just a moment,  
19 Your Honor, just to find that document?

20 MS. FUNDERBURK: Counsel, it can be  
21 placed on the screen if that would be easier for you.

22 MR. SPIVEY: May I approach?

23 MS. FUNDERBURK: You may approach.

24 (Exhibit 26 was marked for  
25 identification.)

1 MR. SPIVEY: And I will note that I am  
2 handing Ms. Mao a copy of Exhibit RB-26, which is the  
3 Notice of Hearing.

4 MS. FUNDERBURK: Thank you.

5 THE WITNESS: Thank you.

6 Q. Now, Ms. Mao, I just handed you a copy of  
7 Exhibit RB-26, the Notice of Hearing. Could you please  
8 turn to page 11 in that document?

9 A. Yes, yes.

10 Q. Would you look now at paragraph -- I think  
11 it's Roman numeral 5, C5. Do you see the statement  
12 there that -- and I, quote, "The AIR and RMS computer  
13 model results are based upon unidentified and possibly  
14 outdated data and experience."

15 Do you see that statement?

16 A. Yes.

17 Q. Ms. Mao, are the AIR and RMS models that you  
18 used for your work relative to this filing, are they in  
19 any way outdated?

20 A. No, they are not.

21 We performed modeling work in July 2023, and,  
22 at the time, both AIR and the RMS model used for these  
23 filings are current -- were current models and that  
24 they were both accepted by Florida Commission for rate  
25 filings.

1 Q. Okay. Please turn now to page 12 in that  
2 Exhibit RB-26.

3 A. Yes.

4 Q. Do you see there in paragraph 13 on the lower  
5 half of the page there, and that that paragraph states  
6 and, again, I quote, "Documentation was not provided to  
7 adequately explain or justify the blending procedure  
8 applied to the AIR and RMS models."

9 Do you see that?

10 A. Yes, I see that.

11 Q. Did you explain, in your prefiled testimony,  
12 how you blended the results of the two models in  
13 arriving at the modeled hurricane losses that are  
14 included in the filing?

15 A. Yes. I explained in my prefiled testimony  
16 that we run each model and approve the modeled loss and  
17 then after we evaluated model loss, then we take  
18 average of the model loss. That is our blending  
19 procedure.

20 Also, in our first response to the first  
21 discovery, we provided Excel document. In the  
22 document, we have specific case with formula on how two  
23 model results are blended.

24 Q. And you just described that you averaged the  
25 two models. Did you take a -- literally take a

1 straight average of the results from the two models?

2 A. That's correct. We --

3 Q. Is that -- I'm sorry?

4 A. Yes. Well, we average the model result. We  
5 give the same weight to two models.

6 Q. So, another way of saying is that you gave  
7 each model 50 percent weight?

8 A. That's correct.

9 Q. Is it common in the -- among the insurance  
10 companies writing homeowner's insurance in the United  
11 States and in North Carolina, is it common to use two  
12 models?

13 A. Yes. It's common. It's especially common  
14 with the reinsurance placement and most companies use  
15 AIR and the RMS model for their reinsurance placement.

16 Q. When companies use two models, is there a  
17 typical or usual way that they blend the results?

18 A. Yes. When companies use two or more models,  
19 it's typical they blend models.

20 Q. And when you say "blend," do they take a  
21 straight average or give them a 50/50 weighting?

22 A. Yes. Equal weighting is a common practice.

23 Q. Is that what you would expect to be done when  
24 you're using these two models?

25 A. Yes. Because model development is a very



1 complex process. As we discussed, it involve three  
2 modules, hazard, vulnerability, and financial modules.  
3 And within each module, there are a lot of assumptions  
4 made, and because of the -- these different assumptions  
5 and the judgment by different vendor models, and it's  
6 typical the model produce different results at state  
7 level and at a territory level. So, it's actually  
8 unexpected you have two models produce the same result  
9 because they have different judgment and the different  
10 assumptions and they produce different results. And  
11 though we don't -- we don't really judge one model  
12 being wrong simply because the result is different.  
13 For this reason, it is prudent to include multiple  
14 views and give different models the same weight in the  
15 result. In that way we incorporate multiple views,  
16 and, then, we also bring more stability to the modeling  
17 results.

18 Q. Ms. Mao, would you now, please, turn to  
19 page 6 of the Notice of Public Hearing, Exhibit RB-26,  
20 and look at paragraph Roman numeral 4, A10, there  
21 approximately about the middle of the page. Do you see  
22 the allegation there -- and I am going to read the  
23 first part of that paragraph 10, "The net cost of  
24 reinsurance on RB-1, pages C-2, C-3, C-4, and elsewhere  
25 in the filing does not appear to be an actual value,

1 but instead is a calculated hypothetical value that is  
2 inappropriate and lacks adequate explanation or  
3 justification. "

4 Do you see that lead in?

5 A. Yes, I see that.

6 Q. And then you see -- then there is a number of  
7 subparagraphs under item or paragraph 10 that are  
8 apparently intended as illustrations of that  
9 allegation.

10 Do you see those?

11 A. Yes.

12 Q. Do you have any comments with respect to the  
13 statement or allegation there that the net cost of  
14 reinsurance is a, quote, "hypothetical," closed quote,  
15 value?

16 A. I disagree with that statement because our  
17 net cost of reinsurance methodology is based on actual  
18 reinsurance purchasing data and based on actual how  
19 companies doing business in North Carolina are  
20 purchasing their reinsurance, how much they pay, and  
21 our analysis is based on actual marketing data.

22 Q. Ms. Mao, you understand, do you not, that in  
23 setting rates here in North Carolina, we are to view  
24 the Rate Bureau as if it was a single company with the  
25 composite experience of all of the companies writing

1 homeowners' insurance in North Carolina? You  
2 understand that?

3 A. Yes, I understand.

4 Q. So, with that in mind, then, what then is the  
5 reinsurance structure and the net cost of reinsurance  
6 that you have provided in this rate filing?

7 A. Our methodology for net cost of reinsurance  
8 is based on the -- assuming a single aggregate company  
9 with the composite North Carolina insurance in that  
10 company, and our structure is an indicated structure  
11 and it's indicated reinsurance pricing based on that  
12 company.

13 Q. And when you did your analysis, did you base  
14 the running of the models on the actual exposures of  
15 the entire industry in North Carolina?

16 A. When we -- yeah, we base on the insurance  
17 companies that has North Carolina exposure and utilize  
18 their reinsurance purchasing data to determine the  
19 reinsurance structure, the indicated reinsurance  
20 structure and pricing, yes.

21 Q. Turn now, if you would, to page 7, and  
22 subparagraph D there, almost at the top of the page.  
23 You see there where it states the -- and I will read  
24 it, "The net cost of reinsurance is, in large part,  
25 additional transfer of profit from policyholders to the

1 industry."

2 Do you see that allegation?

3 A. Yes, I see that.

4 Q. Now, Ms. Mao, we were just speaking of the  
5 fact that under the law here we are to set rates for  
6 the single aggregate company that has the composite  
7 experience of all companies writing homeowners'  
8 insurance in North Carolina. For that single aggregate  
9 company, is any part of the net cost of reinsurance  
10 provision you've provided in this filing, is any part  
11 of that profit to that company?

12 A. No. The net cost of reinsurance is not a  
13 profit for that single aggregate company, and the net  
14 cost of reinsurance is a profit for reinsurance  
15 companies.

16 Q. That's a portion of what the net cost --

17 A. Yes, that's a portion. And also the net cost  
18 of reinsurance is part of the expense of that single  
19 insurance company.

20 Q. So, the net cost of reinsurance to the single  
21 aggregate company that has the composite experience of  
22 all the companies writing homeowners' insurance in  
23 North Carolina is an expense of that single aggregate  
24 company, correct?

25 A. Correct, that's an expense.

1 Q. And is it correct that 100 percent of that  
2 provision is an expense?

3 A. That's correct.

4 MR. SPIVEY: May I have just a moment?

5 MS. FUNDERBURK: Yes.

6 (Brief pause.)

7 MR. SPIVEY: Your Honor, that concludes  
8 my questions for Ms. Mao on direct.

9 MS. FUNDERBURK: Thank you, Counsel.

10 Mr. Friedman, it's ten until 12. I am  
11 assuming your cross is going to take a little longer  
12 than 10 to 20 minutes.

13 MR. FRIEDMAN: I hate to say so, Your  
14 Honor, but that's a fair assumption.

15 MS. FUNDERBURK: That's a fair  
16 assumption.

17 I would, therefore, recommend we go  
18 ahead and recess. I am going to recess for an hour and  
19 a half, which means we will come back on the record at  
20 1:20 p.m. I will ask that counsel be seated, ready to  
21 go at 1:20. For those that are joining us, can be  
22 prepared for the court to come back into session at  
23 1:20.

24 Ms. Mao, I will remind you that you will  
25 continue to be under oath when you come back and take

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the stand.

Thank you. We are in recess.

(Hearing adjourned at 11:51 a.m. with  
resumption scheduled at 1:20 p.m.)

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STATE OF NORTH CAROLINA )  
 )     C E R T I F I C A T E  
COUNTY OF CABARRUS )

I, Renee Habrack, Notary Public, do hereby certify that the above hearing was taken and transcribed by me; and that the foregoing pages are a true and accurate transcript of the testimony of said witnesses. I further certify that the persons were present as stated.

I further certify I am not of counsel for or in the employment of any of the parties to this action, nor am I interested in the result of said action.

IN WITNESS WHEREOF, I have hereunto subscribed my name, this 9th day of October, 2024.

*Renee M. Habrack*

RENEE M. HABRACK, CCR, RPR  
Notary #20041960006  
My Commission Expires: 7/20/29

