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      UNITED STATES DISTRICT COURT
      SOUTHERN DISTRICT OF NEW YORK
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      THOMAS LAUMANN, ROBERT SILVER,
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     GARRETT TRAUB, and DAVID DILLON,
     representing themselves and all
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     others similarly situated,
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                    Plaintiffs,
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                                             12 CV 1817(SAS)
                V.
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     NATIONAL HOCKEY LEAGUE, et al.,
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                   Defendants.
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     FERNANDA GARBER, MARC LERNER,
     DEREK RASMUSSEN, ROBERT SILVER,
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     GARRETT TRAUB, and PETER HERMAN,
     representing themselves and all
     others similarly situated,
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                    Plaintiffs,
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                                             12 CV 3704(SAS)
                V.
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     OFFICE OF THE COMMISSIONER OF
     BASEBALL, et al.,
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                   Defendants.
      -----x
16
                                              New York, N.Y.
17
                                              March 18, 2015
                                              10:00 a.m.
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     Before:
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                        HON. SHIRA A. SCHEINDLIN,
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                                              District Judge
21
                            APPEARANCES
22
     LANGER GROGAN & DIVER, P.C.
          Attorneys for Plaintiffs Laumann, et al.
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     EDWARD A. DIVER
     PETER E. LECKMAN
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     HOWARD LANGER
                                       (Cont'd)
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1 (In open court) THE COURT: Are we ready for the first witness? 2 3 Good morning. Art Burke for the MR. BURKE: defendants. We call Professor Janusz Ordover. 4 5 THE COURT: Remain standing. 6 (Witness sworn) 7 JANUSZ A. ORDOVER, called as a witness by the Defendants, 8 9 having been duly sworn, testified as follows: 10 DIRECT EXAMINATION 11 BY MR. BURKE: Good morning, Dr. Ordover. I understand that you have 12 13 prepared some slides to help us today with your presentation, 14 so I'm going to refer to those, if that makes sense to you. 15 Yes. Of course. Α. So just to start off today, Dr. Ordover, what was the 16 17 assignment that you undertook in connection with this matter? A. I have two main assignments: The first one was to assess 18 the competitive effects of the lifting of territorial 19 20 restraints or restrictions that the plaintiffs are asking for; 21 and the second set of conclusions analysis focused on Dr. 22 Noll's claims about these effects. 23 Q. And what was your conclusion with respect to the first 24 assignment concerning the evaluation of the plaintiffs' relief?

The first conclusion was that the lifting of the

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territorial restrictions or restraints will result in what have now been referred to as winners and losers. The winners of doing — lifting that will be individuals that have a strong interest in potentially just watching one team, whatever team it might be, and just to remind everybody, I'm talking about out—of—market teams because many of these viewers, of course, watch their home team as well. So the lifting of the restraint will enable these viewers to buy a single—team feed potentially everywhere in the United States and watch them as opposed to buying the whole package.

And who are going to be the losers, potential losers, those are going to be the viewers whose viewing patterns are much more diverse, who, during the course of the season, watch more than — spend most of their time on more than one team, and these people would purchase the package. And it's my conclusion that in the but-for-world that I have analyzed, the package may either not exist or would be more expensive.

- Q. And what was your conclusion with respect to the second assignment that you undertook?
- A. My overarching conclusion in that respect was that the various models that Dr. Noll advanced during this case are all flawed in a variety of ways or different ways and therefore that the analysis and his conclusions that are stemming from these models are also unreliable.
- Q. Dr. Ordover, I'd like to direct your attention to the slide

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before you and ask you what significance this analysis has with respect to your conclusion that there will be winners and losers in the but-for-world?

Well, the emergence of winners and losers arises in part from the fact that people's viewing preferences are differentiated, potentially highly differentiated. There are people, who, as I said, concentrate most of their viewing on one out-of-market team, but there are also viewers who spend a lot of viewing time on five or six or more teams. So I divided these pizzas here into three segments, each of which captures the viewing behavior of different types of viewers. actually viewing behaviors that I have observed or we can observe in the data.

As you can see, when you look at, for example, NHL Internet, your Honor, we see that 23 percent of the Internet viewers of NHL program spend a good chunk, actually 90 percent of their time or 90 percent of their views on just one team. So that's just a definition. One can use 95 percent, or I could use 85 percent. It doesn't really make any difference. I look at sensitivity of those numbers with respect to changing the threshold, but nothing much changes.

So you see that for MLB.tv 90 percent of the subscribers spend 90 percent of their viewing on -- devoted 90 percent of their viewing to just one team and the rest obviously maybe on some other numbers of team, but I don't know F3IGLAU1

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about that.

At the same time, on the other extreme we have substantial chunks of individuals of their 45 percent for the NHL and 44 percent for MLB who reached the 90 percent of their viewing but by watching a large number of teams, actually six or more teams.

- Q. And who are the winners and who are the losers in your but-for-world, Dr. Ordover?
- A. Well, as I already mentioned, the winners are likely to be the people in the blue, I think it's blue, slides of those disks, pizza pies. Why is that? Because as I said, they are going to have open an option now which they did not have heretofore and that is to instead of watching -- buying a package in order to watch their most favorite team, they will simply be able to buy that team through a single RSN in those geographic areas in which the team actually will be available.

And the losers are going to be the folks in the green They are the ones who are going to be -- who are portion. buying -- watching at the moment a large number of teams and if the package is not available, they're likely to be the losers. And I also showed that in the but-for-world, the package is likely to be more expensive and therefore if they stay with the package, they will pay more than they otherwise would.

So you spent some time in your report talking about the concept of content exclusivity, and I think you opined that Dr.

Noll's but-for-world is inconsistent with content exclusivity. Can you explain what you mean by content exclusivity, please?

A. Yes, I think I prepared a slide that summarizes my views, three aspects in bullet points. To me, from the standpoint of the definitional aspect of it, which I think is agreed, commonly agreed, when it comes to not only content but to all kinds of property rights, exclusivity exists when a single

owner controls the licensing of its content for distribution.

So the idea of being — that we have a single entity, which actually may be representing a number of entities, but there's a single entity that makes what I would call three key business decisions. First of all, to whom to license. I should have said "to whom" as opposed "to who." Forgive me, your Honor, for that. It's my third language. The second point being how much, so that that controller will set the fee for access to content. And then there would be also other terms in the contractual relationship, and there may be many of those terms, and we already discussed some yesterday, such as including territorial limitations, output in sourcing, so on and so forth.

- Q. Is content exclusivity incompatible with selling content to the multiple distribution channels?
- A. Not at all. I think the fact is that many owners of content or controllers of content will, for profit-maximizing reasons, distribute the content through a variety of channels;

and worldwide.

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they get the benefit of doing so and they do so as long as this is a profitable strategy. So we see multiple channel distribution of content in many industries in the United States

Now, I actually make the last point here which maybe I should mention because I believe that it's actually critical to match up with what I've been doing, and that is, that given the value of content and how it can contribute to the firm's profits, it makes no economic sense or business sense to license such a valuable content to a competitor, that is to a firm, that will implement that content and turn around and compete with the licensor.

THE COURT: Who is the competitor in this example?

THE WITNESS: Well, this is fairly general statement.

THE COURT: I know, but in our scenario, who is the competitor?

THE WITNESS: In our scenario, your Honor, the competitor will be the league --

THE COURT: Right.

THE WITNESS: -- which obtains the content from the teams.

THE COURT: Right. So it's not a typical competitor because the content controller is going to get some money back from that -- from any sale, right? 1/30th the league will share, right?

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THE WITNESS: Excellent question, but it does not go to the heart of the issue. The league will share that is delivered to the owner of the content is a part of the arrangement that the teams have with the league.

THE COURT: That's right, but you're going to get some money back.

THE WITNESS: Yes.

THE COURT: Usually your competitor doesn't pay you money.

THE WITNESS: Well, the fact that I get 1/30th is potentially a drop in the bucket.

THE COURT: That may be, but usually a competitor doesn't pay their competitor, do they? Typically?

THE WITNESS: Typically, I don't know what's typical or not, but I'm saying you're a hundred percent right that in this case, this issue of the fee -- of the profits of the league coming to the teams as a distribution of the league profit.

THE COURT: Right, and I'm still saying, I don't know why you don't agree, that typically competitors don't pay each They compete, and they don't pay each other.

THE WITNESS: That's true, they do compete, and the issue of the fee is separate from that distribution component. I think I'll come back to it at some point.

THE COURT: It's atypical competitor who actually

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gives money back to the controller?

THE WITNESS: It is atypical in that sense, but in many other senses, it is highly typical because it does divert business from the league, from the team.

THE COURT: Yes, it does.

THE WITNESS: That's what I'm looking at.

THE COURT: Yes and no because the team gets 1/30th back. So they get something back.

THE WITNESS: Yes.

THE COURT: We can move on.

We'll have some additional questions on MR. BURKE: precisely this issue, your Honor.

- Q. Dr. Ordover, is content exclusivity prevalent in media industries?
- A. Yes. I have looked at a number of media industries for a variety of issues, but content exclusivity is quite pervasive across the media industries.
- Any examples that come to mind?
 - Well, I like to use books, for example, as an easy understandable case in which the -- a particular book author will sell the rights to the manuscript to a single publisher and the publisher will then sell the books through a variety of distribution channels via the brick and mortar stores such as Barnes & Noble, the few that still exist, we go to the Amazon and so on. So the world is now -- so the book rights are in

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the hands of the publisher. The publisher pays upstream to the author, and the publisher then distributes the content. is not the case that the same book will be owned by more than just one publisher. That will just make no sense from the economic perspective.

So turning to the industrial at hand, Dr. Ordover, how is content exclusivity maintained in the real world currently? Well, I think your Honor may have seen this version of this slide already yesterday but what it says is the following: have divided the world as it's divided in this case into territories that are called in-market or home television territories and out-of-market. And the competitive

In-market, the team/RSN has the sole control over how to distribute the content. It goes through MVPDs and then MVPDs sell their programming down to folks like you and I, but you and I don't watch sports.

THE COURT: Right. I figured that.

environments in-market and out-of-market are different.

THE WITNESS: Sorry about that. Okay. That transparent?

THE COURT: Yes, was that transparent. languages told me the whole story.

Α. The free feed which is the feed that actually team and RSN have in the in-market, they get transferred out-of-market to the league and the league has two channels of distribution, one is the MVPD, or MVPDs actually, and then there is an Internet

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- The Internet package is, of course, distributed to 2 package.
- 3 the people in the couch directly. They can subscribe to it
- without -- or bypassing the MVPD, although not always. 4
- 5 Q. Dr. Noll observed that it's frequently the case that
- 6 multiple MVPDs will distribute the same content. Is that
- 7 inconsistent with your concept of content exclusivity,
- Dr. Ordover? 8
- 9 A. No. I think I already answered that question, which is
- 10 that as long as the league is the deciding -- is the
- decision-maker in terms of how to distribute it to how many 11
- 12 MVPDs to distribute it and on what terms, the content
- 13 exclusivity as it's commonly defined is not breached, it's not
- 14 violated at all.
- Q. Now, I'd like to turn to this next slide and ask you how is 15
- content exclusivity violated in the but-for-world conceived of 16
- 17 by Dr. Noll?
- A. Right. So let's look at in-market for a moment. Nothing 18
- changes in-market, although there's been a lot of debate about 19
- 20 the blackouts and so on that seem to be still not conclusive as
- 21 far as I can tell. But the action is all on the right-hand
- 22 side which is the but-for world out-of-market. And there we
- 23 have a circumstance whereby the teams and the league are going
- 24 to be competing for the same population of viewers with teams
- 25 now being able to sell their feed directly on -- over the

Ordover - direct

- Internet and through the MVPDs and the league selling the same 1 content, albeit assembled from the number of teams through the 2
- 3 MVPDs and over the Internet to the same people on that couch.
- And those people will be choosing which channel to watch 4
- 5 depending on their preferences and prices.
- 6 Sorry. Are you done, Dr. Ordover? 0.
 - Α. Yes.

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- What's the consequence of the elimination of content 8
- 9 exclusivity in the but-for-world out of market?
- 10 Well, the consequence is that the same feed, the Yankees'
- 11 YES Network, for example, which contains the Yankees' games,
- 12 and then abstracting from the Yankees' Network aspect which
- 13 distributes the so-called shoulder programming, that's not
- 14 entering into any of it, you can, in principle, will be able to
- 15 watch, if you so choose, your Honor, you'll be able to
- subscribe to the YES Network. You'll be able to subscribe to 16
- 17 the single-team Internet offering. And you will see the same
- feed if you subscribe to the league package either over the 18
- Internet going directly to the consumer or over the MVPDs, 19
- 20 which will be marketing the so-called league package.
- 21 So now the same content is available potentially from
- 22 four different sources; and that is the kind of competition
- 23 that I believe is in violation of the principles of content
- 24 exclusivity.
- 25 THE COURT: Can we go back one slide for my sake, so

to speak.

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The other one you said four different sources. counted TV Internet as two.

THE WITNESS: Yes.

THE COURT: It was four. So this slide says two sources?

THE WITNESS: That's true.

THE COURT: You're comparing two and four; not one and four.

THE WITNESS: No. Two is fine. Why? Because you can see that these arrows and these little green things, the waves they're all emanating from the upper level of the league and the league sets the price on the MVPD side and the Internet side; entirely exactly what I said is the right way to think about it.

THE COURT: One source.

THE WITNESS: Yes.

THE COURT: One source, two options; the other one was two sources, four options?

THE WITNESS: Exactly. Right.

THE COURT: I was a good student. Okay.

THE WITNESS: You're an amazingly -- in terms of being able to pick up on this.

THE COURT: Never mind. Let's go on.

How are Dr. Noll's damages results affected by the

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competition between the team RSN and the league to distribute the game feeds?

A. Well, the damages that he claims are resulting from the removing of these territorial restraints is that the downstream competition for -- between the teams and the league for the downstream consumers or subscribers is going to of course affect the prices for all of those products, including the price of the Internet packages, as well as the price of the product sold via MVPDs.

And he projects all of these prices to be lower, although we have some debate as to how good his estimates are, but that's what he projects, the prices to fall. And because prices fall, there's -- there are damages.

The dollar amounts will depend on how much falling price there are, but that's his basis. His basis is competition will depress prices and that competition is being restrained now by territorial restrictions and therefore the whole case is that.

- It's the competition between two owners of content distributing the same content in competition that's driving the results?
- A. Well, I think it's worse than that. I think it's the competition that the owner of the content faces from the league which uses its content to compete with the owner. That is the unusual circumstance. We normally don't see it unless that

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kind of competition is mediated through, for example, prices or the license fees, those kinds of terms.

So in Dr. Noll's world, that mediation, there is no such mediation. It's head-to-head competition of the league and the team using the same content, albeit the league has more stuff in the package than just YES' content or Yankees' content.

- Q. So in a world where the teams have the power, the right to sell their content in the out-of-market, how could they -- what steps could they take to preserve content exclusivity in that world?
- A. Well, I think that there are two steps and I will focus on the second. The first step is, of course, for the teams to stop making the league package available. I mean, after all, they own the league or the league is controlled by the teams and the teams can make a decision that the package is not something that they wish to offer.

Similarly, in principle, a team can refuse to license its product to the package and that will have potentially substantially ramifications, because some teams a lot of people would like to watch. So when that feed gets removed from the package, the package is no longer the same package as we have it today, it's a different package, and therefore it will have impact on people's utilities of those people who continue to subscribe to the package. So that's one set of solutions.

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The second set of solutions is the one that I will speak a little bit more fully about is that the team/RSN - I'm making no distinction between team and RSN in this part of my discussion - the team/RSN pair can decide, consistent with its rights that are allocated to it, how much to charge for the right of access to its feed.

And it's my view, and I believe it's going to be -- it's the view of pretty much all the economists that I can think of that the availability of the feed fee will be a solution to the exclusivity -- content exclusivity problem. Why is it the solution? Because it will reflect the profit maximizing decision by the team --

THE COURT: Yeah, but if the league makes a decision as a joint venture that the fee is 3.3 percent for each team in the league, then that's the fee. They've agreed that my fee for my feed is 3.3 percent of the profits. It's a joint venture. We want to keep things equal. So that's what we're going to take as a fee.

THE WITNESS: Your Honor, it's not that simple because --

THE COURT: I didn't think it was that simple. Maybe we can ask you to sort of address her Honor's questions, how did you go about calculating what you thought the feed fee would be in the but-for-world, Dr. Ordover? I used a fairly standard way of thinking how this

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process will play itself out in the world in which the team has actual right to license its content. What you, your Honor, has instanced is a situation in which the team has no right, it's the league that says the team are going to pay you 1/30th.

THE COURT: No. I'm saying all the teams decide that is in their interest, not because it's profit maximizing, but because it's good for baseball or it's good for hockey, if we keep that share equal, we're going to have good games, everybody can buy rich players, we're going to, you know, I'm serious, we're going to keep the game competitive, so to speak. I'm not using the word competition in economics, but we're going to make the game competitive. So we decide it's in our interest for us to have an equal share, that's what our team voted for.

Instead of maximizing our profit where the Yankees are getting ten percent but the Giants are getting only two percent, we're all going to take three and-a-third percent, what if that's their vote?

What if the teams do that?

THE WITNESS: Well, I cannot argue that if the teams together can make that decision that they will not make the decision.

Although I can point out that in my declaration, I actually considered that point and show that in the world that will emerge if the territorial restrictions are lifted, the

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teams will -- the league will, in fact, agree to pay a per-feed fee to the teams, this is what is referred to as Section VI analysis, in which the league acting on behalf of the industry, which includes its profits and the profits of the member teams, decides on what the per-feed fee is. So in a way, this approximates the conditions that you are speaking of.

And in a sense, it is a solution to the problem in which the teams have the rights to charge individually-determined feed fees if it so choose, but I abstract them from that in Section VI and say, okay, well, let's see what the league that is interested in maximizing profits of all the component parts will decide the right feed fee is. And it turns out that it's somewhat lower that what the Section IV analysis does, but it still will be positive. In other words, despite the presence of this back-end distributions of 1/30th of the league profits, the league, acting on behalf of its member teams, will indeed impose or introduce a per-feed fee for reasons that I will come back to in a minute.

THE COURT: Let me make sure I understand. done that way, it may be that the Yankees' feed would make a lot more money than the Astros' feed, and they become even a richer team, right?

Under that assumption, the feed fee that THE WITNESS: the Yankees will earn is going to be X cents per subscriber.

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THE COURT: Therefore more than the Astros will make because there are more subscribers for the Yankees, no?

THE WITNESS: No, your Honor. The number of subscribers is the same because it's subscribers in the league package. So in that account, everybody is going to be making the same amount, right?

THE COURT: Yes.

THE WITNESS: If the feed fee is ten cents per subscriber and you as a member -- you are the Yankees and I'm the Astros.

THE COURT: Right.

THE WITNESS: And the number of packages sold is a thousand, then each one of us will make ten cents times a thousand. And at the end of the day, we also get 1/30th of what's left of the profits.

THE COURT: So all the teams are making the same amount of money?

THE WITNESS: Exactly. So nothing has changed as a result of that. The only thing that is affected is, of course, the prices for the league package and for the standalone fee -standalone prices as well because in the Professor Noll model, those are determined competitively through the so-called Bertrand model of price competition.

THE COURT: So no one team is going to bargain as to what its fees is going to be; it's going to be the same as

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every other team.

THE WITNESS: Yes, that's why I think it's a ridiculous assumption. I think one would expect the teams to try to bargain for a feed fee that reflects the value of the team's feed to the package as well as that reflects the competitive implications for its own standalone programming sales by virtue of competition between the team and the league, so there are two aspects that will be in play.

MR. BURKE: Perhaps I can put a question to Dr. Ordover that might crystalize this.

- Her Honor has asked why not just accept a 1/30th share of the profits; isn't that sufficient compensation for the teams for giving their fee to the league? Why do you think that's not a sufficient compensation for the teams?
- It's not a sufficient compensation for a simple reason that it's totally unrelated to the value of the team to the package, as well as to the competitive implications of the team from licensing its feed to the package. And those two elements' effect are going to be the ones that the teams are going to bargain for. And I showed that they would bargain for the fees that are, at the minimum, 17 cents per subscriber.
- Q. Briefly, can you just explain how you calculated what the feed fee would likely be in the but-for-world.
- I adopted the standard approach to modeling bilateral negotiations between single party on one side and the numerous

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counterparties on the other side. That is the economic models that deal with that and I think those models or those approaches are referenced in Dr. Noll's declaration, but they're certainly referenced in the paper by Crawford and Yurukoglu which sponsors as part of their analysis type of bargaining that I will describe in a second if you ask me a question.

- What's the consequence for the price of the out-of-market package based upon the feed fees that you calculated?
- Well, the consequences are on the slide. Because the feed fees are going to be positive as a result of this bargaining, the league is going to be paying more for the feed than it's paying in the actual world. In the actual world, the league is paying nothing, getting the feed for free, distributing the profits at back end as your Honor pointed out, but in the but-for-world that in envisage with teams bargaining in the standard fashion with the league, the feed fees are going to be positive and the agglomeration of those feed fees is going to have the upward pressure effect on the price of the package. And I was -- and I calculated those prices using the third version of Dr. Noll's econometric model.
- Q. What's the relevance of this to your conclusion with respect to the existence of winners and losers in the but-for-world?
- Well, the relevance is that if the package is more

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expensive in the but-for-world than those people who currently buy a package, some of them may end up paying more - not all of them because some will go to standalone fees - but those who remain will be paying more and the numbers are actually substantially more.

Now I know everyone is very eager to get to the subject of double marginalization, but before we do that, I have one question for you, Dr. Ordover.

Dr. Noll criticizes your analysis as a collusive. What's your response to that?

A. My response is it's a total misunderstanding of what I'm What I'm doing is I'm analyzing how we'll -- the league and the standalone and the teams try to arrange their affairs in the but-for-world in which the teams now have a new right which they did not have before. The new right is to sell their programming in the -- outside of their home television territories, HTTs, and they will bargain with the league for some right to access that feed.

because it expands output and it enables the league to obtain access to feeds that they may otherwise not obtain access to. Does your model involve any coordination between or among the teams with respect to the negotiations with the league? No, not at all. The negotiations are bilateral between the team or the team's RSN and the league, and no other teams are a

So this is a procompetitive proconsumer activity

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part of that negotiation.

- All right. Now, the subject we have all been waiting for. 0.
- 3 Dr. Noll has criticized your analysis as introducing double
- marginalization in an inefficient fashion. Before we address 4
- 5 that, could you just briefly describe for the Court what double
- 6 marginalization is?
- 7 Double marginalization, we spent a lot of time on it
- yesterday so very quickly, it's a circumstance in which the 8
- 9 product of the service moves down from the top level all the
- 10 way down to consumers; and the potentially at every stage of
- 11 the process economic actors impose a margin on the costs that
- 12 they pay for getting the product to themselves.
- 13 So the wholesaler imposes the markup on the product
- 14 that it sells to the retailer, and the retailer turns around
- 15 and imposes its markup, so there are two markups. That's why
- it's called double marginalization. 16
- 17 Does double marginalization exist in the real world?
- 18 Absolutely. Double marginalization is something that
- 19 exists in the real world for a variety of reasons.
- 20 Can you provide an example or two.
- 21 Well, again, we already spoke about the books in which
- 22 there are margins along the way in which the author will put a
- 23 markup on its costs when it negotiates for a book contract, the
- 24 publisher puts a markup on its cost when it sells the book to
- 25 the retailor or to the wholesaler, and the wholesaler puts a

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markup and so on, and the retailor will put a mark up on the top of the costs that it incurs by the time the book reaches the bookstore.

We have the same type of markups in music and we certainly have these types of markups in patents or in the license of intellectual property when the owner of the intellectual property will charge a per-unit royalty and the firm that uses the patent will potentially and generally mark up the price of the product that uses the IP.

MR. LANGER: Your Honor, we object to the extent Dr. Ordover is now testifying to the matters that are supposed to be Dr. Pakes' testimony. So it would be duplicative, and your Honor issued an order as to this.

MR. BURKE: I think there were two different issues raised with respect to double marginalization. Dr. Ordover has introduced double marginalization with respect to a fee that is charged by the teams to the leagues, and that has been criticized by Dr. Noll as introducing double marginalization.

What Dr. Pakes addresses is a separate part of the chain of distribution. What he says is that there will be a charge from RSNs to MVPDs and Dr. Noll failed to model that. There was a lot of discussion about that yesterday. That's a different part of the chain of distribution.

We actually acknowledge there's some overlap here and we're not going to retread things, but I think Dr. Pakes will

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Ordover - direct

have some unique things to say about double marginalization and that other part of the distribution chain.

THE COURT: It's your time. You have four minutes left, so objection overruled. You want to spend the four minutes going over material that's going to be covered by somebody else, that's okay with me.

MR. BURKE: I think, if you don't mind, I'll take a little time out of my redirect if that's possible. I have 15 minutes of redirect.

THE COURT: You have 15 minutes of redirect. How much of that do you want to use on direct?

MR. BURKE: I think I'll go up to 55, so if you don't mind, I'll just leave five for redirect.

> THE COURT: Okay.

BY MR. BURKE: 15

- Dr. Ordover, your model imposes a curve -- a per-subscriber fee to the league, is that correct?
- 18 Α. Yes.
- 19 And does that create double marginalization?
- 20 It does. Α.
- 21 Why is it in a team's interest to create double
- 22 marginalization in the but-for-world?
- 23 It's in the team's interest because, as we just discussed,
- 24 the league competes with the team for subscribers, and
- 25 therefore, the team has an interest in the price at which the

Ordover - direct

- league is going to be able to compete. By charging a feed fee, 1
- it is going to be trying to capture the profits that it loses 2
- 3 on diverted sales. This is the whole underlying economics
- 4 behind what I'm doing.
- 5 Q. And just to go back to her honor's questions, why doesn't
- 6 just sharing it 1/30th of the profits of the league, why
- 7 doesn't that accomplish the same thing?
- A. Because that has nothing to do with either the value of the 8
- 9 fee or with the issue which I just instanced, which is the fact
- 10 that the team is going to be losing its subscriptions to the
- 11 league and how many subscriptions its going to lose depends in
- 12 part of what the package sells for and what the package sells
- 13 for, as we know from the calculations that Dr. Noll has enabled
- 14 us to make, is going to depend on the sum total of the costs of
- 15 the feed fees to the league.
- And have you looked at real-world contracts in this 16
- 17 industry?
- 18 Α. Yes.
- 19 And is double marginalization present? Q.
- 20 Yes, it is. Α.
- 21 Now, Dr. Noll points to the 2007 ExtraInnings contract Q.
- 22 between Comcast and DirecTV on the one hand and MLB. And he
- 23 says double marginalization has been eliminated in that
- 24 contract because there's resell price maintenance essentially
- 25 established in that contract.

few questions about it.

How does that analysis relate to your opinions?

A. It's entirely consistent with my analysis because the price that will be established, whether directly by the team or by the negotiation between the team and the league package, is going to be set at the point at which these diversion effects are going to be reflected. In other words, just because there's an RPM it does not mean that the RPM, retail price maintenance, and it's a minimal one, minimal RPM, does not leave the margin both for the team and for the -- from the MVPD.

Q. I'd like to direct you to a passage from the Crawford and Yurukoglu - yeah, pronounce that - the passage from their article. And I guess I'll read it for you and briefly ask a

C&Y say "Linear input costs above the production marginal costs, in this case zero, are often considered unrealistic because with downstream monopoly, the upstream and downstream firms can find fixed transfers that make both better off after changing the input cost to marginal cost."

What are they getting at in that sentence, Dr. Ordover?

A. What they are getting at of the sentence is that in some circumstances, when there's, for example, a single firm upstream dealing with a single firm downstream, one way to get around the double marginalization is to sell the product at

Ordover - direct

- marginal cost and then soak up the profits through a fixed fee; 1 and that is a well-known result in economic literature. 2 3 familiar to everybody who works in that particular --
 - Do you agree with that statement? Q.
 - Yes, I do. Α.

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- 6 Let's focus on the second sentence that's highlighted.
- 7 "When there is downstream competition, however, committing to linear contracts is one way of avoiding the dissipation of 8 9 profits due to such competition."
 - First off, when we refer to linear contracts, what is that a reference to?
 - A. That's in a reference to a contract in which the amount paid is a function of the per-unit fee times number of units sold.
 - Is there double marginalization in linear contracts?
 - A. Yes, as long as the per-unit fee is set by the marginal cost.
 - Q. What does that second sentence mean if you can try to translate for us.
 - A. What it means is the upstream firm, the licensing firm, does not want the downstream firms to compete whatever profits they might make, they would make or can make because by doing so, it undermines its own business or its own profitability. In the instant case, that is certainly even more transparent by virtue of the fact that the downstream firm has downstream

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business. And when it offers the fee to the package, it is going to affect the package's cost and thereby have an impact on how intense that competition is going to be.

And as I said, it's a well-known result in economics that the licensor will try to capture in the fee, through the fees the diversion of profits from itself to the rival, so try to be compensated for it.

- To try to bring this little section to a close, one of the criticisms that plaintiffs have leveled at you is that you're confusing the allocation of rights between RSNs and the teams.
- A. No, it doesn't make any difference whatsoever. team/RSN pair is going to be doing the bargaining or the team itself can be doing the bargaining. This is irrespective of how the upstream segment is organized.

Does that affect your analysis at all, Dr. Ordover?

Just to finish up this section, I want to make sure we have sufficiently answered one of the issues raised by her Honor, which is the idea that an idea teams that might be profit-maximizing they might be, I don't know, altruistic in taking account the interests of baseball.

Does Dr. Noll's model assume any of that or does it assume profit maximization?

Dr. Noll's model, everything in his model, including the demand estimation, the competition is all driven by the assumption that the teams are, and the league are,

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profit-maximizing entities. He does not allow for all of these kinds of considerations whatsoever; and, therefore, I don't see what's the issue vis-a-vis what I'm doing, but one in principle could account for those other considerations through mathematical adjustments to the objective functions.

THE COURT: In these various reports, I have seen the word "differentiated" and "undifferentiated" to describe competing products or not.

Are these products in your view directly competitive or are they different products? Because it may be that they're different products and some people just want the standalone and don't want the package and other people want the package and would never want the standalone.

So, are they head-to-head competitors in that sense? Like two companies who are selling hammers, they're really the same, it's just whether you like, I don't know what, one company or another company, but the hammer is the same and it does exactly the same thing.

THE WITNESS: Well, let's take potatoes because they are less differentiated than hamburgers.

THE COURT: I said hammers.

THE WITNESS: I'm sorry. Hammers.

THE COURT: They're really the same and they do the same thing.

THE WITNESS: Yes, unless you are a connoisseur of

hammers --

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THE COURT: Right.

THE WITNESS: -- they're the same, or nails, so yes, you are right differentiated products are not perfect substitutes. In other words, when I get to watch a feed of the Yankees versus the Diamondbacks, I'm not deriving the same amount of satisfaction and, therefore, I may be willing to pay less for the team that I care less about.

THE COURT: No, but I meant the single standalone versus the package.

THE WITNESS: Sure. The package competes with the standalones, but it's a different product to the extent that it has a collection of standalones in it. But I think it's recognized here by everybody on the economists' side that while these are not perfect substitutes, there are substitutes which is why Professor Noll uses the so-called Bertrand model of competition to model the intensity of that competition.

> THE COURT: Between the standalones and the package? THE WITNESS: And -- yes, exactly.

THE COURT: Not between two standalones, but between the standalone and the package?

THE WITNESS: He models competition among all of the products, but in particular between the package, the league package and the standalone or the standalones. That are the drivers of the outputs of -- on price together with the costs

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going into each one of those products.

But he assumes that those products while differentiated, they are not so differentiated as to offer no competitive restraint on each other. That's the basis of everything he said.

- In fact, all of the damages that he generated, a predominate amount of the damages, is as a result of that competition between the standalone and the package, right?
- That is true. Α.
- We're almost done here. I just have one last issue we want to address. We heard some testimony yesterday regarding this slide which illustrated the fact that under Dr. Noll's model, the multiteam fan it turns out that sort of counterintuitively 99 percent of them are going to buy the standalone package and only one percent will buy the league package.

You heard Dr. Noll's testimony about that yesterday? Yes, I had. Α.

Q. He explained I believe at the time that the explanation for this was that multiteam fans were especially price-sensitive and therefore they would opt for the lower cost option, even though it didn't give them the robust number of teams that they would appear to want.

Do you recall that?

I thought it was a peculiar kind of explanation, but I won't go into that.

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- Did you do any analysis to test that conclusion and whether in fact this could be explained by a differential in price sensitivity?
- A. Yes. In fact, the test is on the next slide, your Honor. Here, I was able to calculate or derive the traces the different types of fans would make in the world in which they pay exactly the same amount for the package and for the -- or for the standalone.

Now, I think most people would say, well, gee, if I can pay \$20 and a nickel for a package versus standalone, I'm likely to buy a package? Why? Because I get everything: get the standalone and everything else. Right?

So, what are the results from that kind of a calculation? Because that removes the issue of different prices for a standalone versus the package and therefore removes the issue of price sensitivity. There is no differences in prices, and economic logic would suggest that everybody is going to likely opt out for the package.

Well, the results do not support common sense and every time the results do not support common sense, I generally tend to go with common sense.

What we see in the last row, if you -- what we see is the multiteam fan, those are the people who like the sport, they all end up buying -- or 86 percent of them end up buying a standalone.

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THE COURT: Ninety-six.

THE WITNESS: Ninety-six percent of them end up buying a standalone, only four percent of them buy a package, despite the fact that the package is equally priced and contains the standalone. So why? Well, we can talk about it, but I run out of time.

- Anything to say in conclusion?
- I think my conclusion is quite straightforward and that is that everything that Dr. Noll generates in terms of impact and his calculations of damages is all driven by what I believe is an economically unsound assumption, which is that in the but-for-world in which the teams have the right to sell their feeds out-of-market and they have the right obviously, as he admitted, to negotiate with the league package for the fees, that they will indeed continue to deliver the product for free or for the amount of back end that the package distributes in the end. As I said, the amount of back end the package distributes at the back end has nothing to do with the It has to do with the economic arrangements that licensing. precede all of this -- the whole circumstance that we are dealing with. So in a way, his model is really hard-wired to deliver the results that he has reported in his declaration.
- 0. Thank you, Dr. Ordover.
- Α. Thank you.

Do you need to take a ten-minute recess THE COURT:

Ordover - direct

now because I really rather take it by the clock than by the schedule. Could you do your cross?

MR. LANGER: I could begin, and may I do it from counsel table?

THE COURT: Sure, sure.

MR. LANGER: I'd like to hand the witness, your Honor and your Honor's clerk a book of documents that I'm going to be using as well as the joint exhibits that we'll need to make reference to them as well. And also at a certain point, I'm going to be using documents that the defendants deem highly confidential. And rather than have everyone exit the courtroom, what I suggest we do, since I'm not going to put them on the screen is I will not identify the teams in my questioning and ask the witness not to because the team identification is not essential.

THE COURT: Okay. Just remind me, though, of your name.

MR. DIVER: I'm Howard Langer.

THE COURT: Mr. Langer.

MR. LANGER: Does everybody have the exhibits? The joint exhibits as well?

CROSS-EXAMINATION

BY MR. LANGER:

Q. Dr. Ordover, you've never written in the field of sports economics, is that correct?

Α.

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That's correct, sir.

- 2 And you never taught a course in the theory of sports Q.
- 3 economics, is that correct?
- That is also true. 4 Α.
- 5 And you already told your Honor you're not a sports, is
- 6 that right.
- 7 I watch some, but not necessarily the two sports that we
- 8 spoke about.
- 9 And you're not an econometrician, is that correct?
- 10 That is true. I've never taught a course in econometrics. Α.
- 11 And you never written on econometrics; is that right?
- 12 That is true, but I use the tools of econometrics in my
- 13 daily practice.
- 14 Q. And in your preparation for your opinions, you didn't
- 15 review any articles on sports economics or sports broadcasting;
- 16 is that correct?
- 17 A. I have reviewed several articles in the past prior because
- 18 of preparing for another case; and since my deposition I have
- 19 also looked at a number of articles relating to sports
- 20 economics.
- 21 Well, would you look at your -- an Exhibit 4 in the book.
- 22 Α. Sure.
- 23 Four you said? THE COURT:
- 24 MR. DIVER: Yes.
- 25 MR. LANGER: Yes, your Honor.

Case 1:12-cv-01817-SAS Document 341 Filed 03/27/15 Page 38 of 220 F3IGLAU1 Ordover - cross THE COURT: Which is titled "documents considered." MR. LANGER: Right. Q. These are the documents that you listed as the documents that you considered that were attached to your declaration; is that correct? A. Yes, sir. (Continued on next page)

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- 1 And it doesn't contain any documents relating to sports economics, is that correct? 2
 - Yes, that is true. I did not review any such articles.
 - Now, you are an expert in the field of proof of impact Q. in class actions, is that correct?
 - I do not believe there is such a field of expertise. Α.
 - Well, you testified in at least 25 cases on the subject, have you not?
- 9 A. I think you are characterizing my testimony as evidence of 10 proof of expertise. My expertise is as an industrialization 11 economist who spends most of the time thinking about antitrust 12 economics, but I also engage in other types of economics.
 - THE COURT: Not characterizing it though, you have testified at 25 trials involving class actions?

that's your characterization, not mine.

- THE WITNESS: I have not testified at 25 trials involving class actions.
- THE COURT: Well, forget the word trials. In 25 cases involving class actions, whether by deposition, trial, hearings?
 - THE WITNESS: Yes. Yes, I have, yes.
- Q. And in every instance you were of the opinion that impact could not be proven on a class basis, is that correct?
- 24 In the cases that I testified, that's the answer, yes.
- 25 And you have also given opinions in the areas in

- 1 | class actions that didn't involve antitrust law, is that right?
- 2 A. That did not?
- 3 Q. Yes, involve antitrust law.
- 4 A. Yes, I testified on other types of class actions.
- 5 | Q. And your opinion in every instance in those cases as well
- 6 was that impact could not be proven on a class basis, is that
- 7 | correct?
- 8 A. In the cases I have testified, yes.
- 9 Q. OK. Now, in light of the fact that you have testified so
- 10 | much on the subject, you are aware that antitrust class actions
- 11 have been certified and tried to juries, and verdicts have been
- 12 | upheld on appeal, isn't that correct?
- 13 A. Yes, and some have not been certified, and I testified in
- 14 some of those, yes.
- 15 | Q. Now, you realize last year there was a case called Urethane
- 16 antitrust litigation, which was a class action on behalf of
- 17 | purchasers of Urethane, where the case was tried to a jury, a
- 18 | verdict of treble of over a billion dollars was obtained, and
- 19 | it was upheld on appeal by the Court of Appeals? Do you recall
- 20 | that?
- 21 | A. I do recall that case, because I was the expert witness,
- 22 | and the hearing on class certification was not in front of the
- 23 | jury but it was in front of the judge.
- 24 | Q. Excuse me, that was a case called Polyurethane.
- 25 A. Oh, I'm sorry.

- Ordover cross
- 1 | Q. This is a case called Urethane.
- 2 A. I was not involved in that case, so I don't know anything
- 3 about it.
- 4 Q. You don't know anything about it. You have no idea how
- 5 | impact was proven on a class basis.
- 6 A. It was not my case. All I saw was the write-up in the BNA,
- 7 | but I don't know much about that.
- 8 Q. You're aware that there was a trial in a case called In Re
- 9 | Plywood Antitrust Litigation that was tried to a jury on a
- 10 class basis, and a verdict was rendered and upheld on appeal?
- 11 A. Yes, I heard about it from reading the BNA, but I was not
- 12 part of that litigation.
- 13 | Q. Did you ever endeavor to find out how impact was proven in
- 14 | that case?
- 15 | A. The answer, that would be no. There are limited avenues
- 16 | for finding how it was proven, and, second, I don't see any
- 17 | reason to learn such things because I have my own ways of
- 18 | thinking about these types of issues, yes.
- 19 Q. Recently you offered the opinion that proof of impact could
- 20 | not be proven on a class-wide basis in a national class action
- 21 | involving corrugated boxes, is that correct?
- 22 A. Yes.
- 23 | O. OK. You are familiar with the fact that in 1982 the Third
- 24 | Circuit upheld a class certification for a class, a national
- 25 class of purchasers of corrugated boxes and upheld the

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certification of the class?

that was upheld on appeal.

- I am aware of it in the same way that I'm aware of other 2 3 cases, by reading or perusing the BNA Trade Reporter.
- 4 Q. But in reaching your opinion you did not seek to -- in that 5 case you did not seek to find out how impact was shown on a 6 class-wide basis for the exact same industry in another case
- I did not testify in that case. I had no access to the 8 9 record and, therefore, there was nothing for me to learn other 10 than know that that particular case went to the jury, as you 11 say, and that the class was certified.
 - Q. Excuse me. The Court of Appeals for the Third Circuit completely describes in their opinion how the two experts were going to prove impact. You did not endeavor to learn that, is that correct?
 - A. No, I did not endeavor to do that, because, as I said, I am capable of undertaking my own analysis, and some of my analyses were actually found persuasive enough in class certification cases.
- 20 Q. OK. Now, in the majority of those cases they were not, is 21 that correct?
 - A. A number of cases my analyses were not upheld, and in several rather important cases my analyses were upheld.
- 24 Q. Now, you testified at the beginning that this case is about 25 lifting territorial restrictions and the effect of that, is

1 | that right?

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- A. That's how I understand that.
- 3 | Q. OK. Now, did you prior to this case do any work or have
- 4 any knowledge of the territorial restrictions of Major League
- 5 | Baseball?
 - A. Beyond what one reads in the newspaper, the answer is no.
 - Q. Turn to paragraph 14 of your declaration, please.
- 8 THE COURT: Do I have that?
- 9 A. That's which tab number?
- 10 | O. It's Joint Exhibit 5.
- 11 | A. So this is --
- 12 THE COURT: I don't have that book.
- 13 A. That's in the white notebooks?
- 14 Q. Yes.
- 15 | THE COURT: But I don't have that.
- MS. WILKINSON: Your Honor, we have copies.
- 17 THE COURT: Thank you. Now I have 1 through 14. Is
- 18 | there a second volume?
- 19 MS. WILKINSON: There is.
- 20 THE COURT: No rush. I am only looking at Exhibit 5.
- 21 MR. LANGER: While your Honor is getting it --
- 22 | THE COURT: I have Exhibit 5.
- 23 | Q. Look at page 8, paragraph 14.
- 24 A. One second, please, sir.
- 25 | Q. Do you see that?

- Α. Yes.
- And in this paragraph you say in the third sentence, "In 2
- 3 general, a team's home team territory is the geographic area
- around the location of its home stadium arena." Do you see 4
- 5 that?

- A. Yes. 6
- 7 Let me ask you this: You know that Las Vegas is within the
- home team territory of Los Angeles, is that correct? 8
- 9 Α. Yes.
- 10 Is that in the location of its home team stadium arena?
- 11 you think someone is going to go from Las Vegas to watch a game
- 12 in Los Angeles?
- 13 I have no opinion on that. It's not likely that somebody
- 14 will travel that distance, but those territories are devised by
- 15 the league, and they design the territories according to
- whatever criteria they use to design those territories. 16
- 17 Q. You understand that San Francisco is in the -- Las Vegas is
- 18 also in the home team territory of San Francisco?
- 19 A. Yes.
- 20 Q. You understand that Des Moines, Iowa is in the home team
- 21 territory of the teams in Minneapolis, Chicago, St. Louis,
- 22 Milwaukee and Kansas City, is that right?
- 23 A. I have not memorized all of those states or cities, but I
- 24 take your representation as being true.
- 25 And in none of those circumstances do those cities

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Ordover - cross

- represent the -- does Des Moines represent the geographic area around those cities, is that correct?
 - A. That is true, but those are not there are a number of circumstances, a preponderance of circumstances, a majority of circumstances in which what I'm saying is true, and in fact I offer citations to support those statements, so I'm not making
- Q. Now, also you say that the teams require, that the whole economic system that's here requires that these territories be allocated in this fashion in order for them to derive sufficient economic return to maintain the system that exists.
- 12 | That's the core of your testimony, is it not?
- 13 A. No, it has nothing to do with my testimony.
- Q. I see. Now, Albany, New York, in hockey that's deemed to be in the home territory of Buffalo, isn't that correct?
- 16 A. If you say so.

them up, sir.

- Q. You mean you haven't studied these things in offering this testimony?
- A. I am familiar with the fact that there are home team
 territories. I have not devoted the time required to memorize
 them, because I do not believe that any of these issues bear on
 the core of my testimony, which is how the licensing of rights
 would occur in the "but for" world.
 - Q. I see. And in baseball Albany is considered in the home team territory of New York, is that right?

- 1 That's my understanding, yes.
- 2 Bangor, Maine is in the home team territory of Boston, Q.
- 3 right?
- 4 Α. If you say so.
- 5 And Billings, Montana, which is 980 miles by car from
- 6 Seattle, is in the home team territory of Seattle.
- 7 If you say so. I will not challenge any of your claims.
- And having studied and seen these things, you made a 8
- 9 statement in your affidavit that in general a team's HTT is the
- 10 geographic area around the location of its home stadium.
- 11 that right?
- 12 Α. In general.
- 13 0. In general?
- 14 In general. That means as far as I know in the English Α.
- 15 language that it's not always the case, but it's generally the
- 16 case.
- 17 Q. I see. Now, does hockey allocate its territories among
- 18 teams in the same way as baseball?
- I think there are some differences. Again, I'm not 19
- 20 testifying as to whether they are material or not. And that
- 21 makes no difference for any of my conclusions that I have
- 22 reached in my reports.
- 23 So, you don't know whether hockey has -- if I told you that
- 24 hockey as part of its system has what is called spheres of
- 25 influence, you wouldn't know what I was talking about, is that

right?

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- I understand the plain meaning of those two words, and I also know that in hockey there are three layers of home team territory, depending on the distance from the stadium, as well
 - And do you know what the rights are and how they differ according to each of those territories?

as on the reach of the cable system and the RSN.

- Again, that's my memory, and it's also totally irrelevant to everything that I have testified to, and that is that when you move outside of the core home team territory to the outer boundaries, the team has to pay some miniscule amounts per subscriber or per viewer to the league for the rights to televise into those territories, so we have a double marginalization.
- Q. You expressed the opinion that in a "but for" world there will be fewer games broadcast and the broadcasts will be of inferior quality. Is that correct?
- A. Well, you have to read the whole thing. I made that statement in a particular set of context.
- 20 Well, look at paragraph 30 of your declaration, sir.
- 21 Paragraph what? Α.
- 22 Ο. 30. I'm sorry, I didn't mean to shout. I'm so used to 23 speaking quietly that sometimes in the courtroom I get carried 24 away.
- 25 Do you see on page 18 you say declarations from RSN

- executives from 21 CF, DirectTV and Comcast confirm that 1
- 2 requiring RSNs to provide their live game feeds to the BFW
- 3 league package for free would result in fewer games being
- 4 produced in the BF world or a decline in the production
- 5 quality. Do you see that?
- 6 Α. Yes.

- That's what you said.
- That's what I learned from the declarations of the 8
- 9 executives that testified, and I believe that there is some
- 10 merit to these claims.
- 11 Q. Right. But you testified at your deposition, did you not,
- 12 that you did no economic analysis at all to confirm that.
- 13 That is true, but those conclusions are entirely consistent Α.
- 14 with economic analysis, and they are entirely consistent with
- 15 my views about the benefits of exclusive ownership of rights.
- Q. Right. And you testified you relied on the declarations of 16
- 17 those experts, correct?
- 18 A. I don't recall the exact words, but I cited them, and I
- 19 used them as a part of my analytical approach to issues in this
- 20 case.
- 21 Q. Right. And your declaration is dated what date, sir?
- 22 November 12, is that right?
- 23 Α. That is true.
- 24 And if you turn to Exhibit 3, which gives the dates of all
- 25 of those executives' declarations -- do you see that, Exhibit

F3I7LAU2 Ordover - cross

1 | 3?

- 2 | A. Yes.
- 3 | Q. They are also all dated November 12, is that right?
- 4 A. That is true.
- 5 Q. And you testified at your deposition that you did not
- 6 | receive drafts of them in advance, is that correct?
- 7 A. That is true.
- 8 Q. OK, thank you.
 - A. But may I finish my answer?
- 10 | Q. Well, it was a yes or no question.
- 11 THE COURT: I think you did finish your answer, but go
- 12 ahead and explain.
- 13 A. Anyway, I explained in my deposition that I spoke to a
- 14 | number of those executives prior to the filing of the
- 15 declaration.
- 16 Q. Right. So, according to your declaration, you spoke to
- 17 | those people, you read their declarations and read their
- 18 depositions, but when I asked you at your deposition who any of
- 19 | them were, you couldn't identify a one of them, is that right?
- 20 A. That is true, because my memory for names is very weak.
- 21 Q. OK. Now, did you see other documents in which other of
- 22 | your clients disagreed with those executives?
- 23 A. I may have or I may have not. I will be happy to review
- 24 | those documents with you.
- 25 Q. Would you look at Exhibit 17, please.

F3I7LAU2 Ordover - cross

- 1 A. Sorry?
- 2 | Q. Exhibit 17.
- THE COURT: Which book are we in?
- 4 MR. LANGER: In the black book of exhibits.
- 5 Q. Do you see this?
 - A. I will be there in one second. OK.
 - Q. This is an e-mail from Mr. Bowman. Do you see that?
- 8 | A. Yes.

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- 9 Q. And Mr. Bowman is one of the people whose declaration and depositions you read, is that right?
- 11 | A. Yes.
- 12 | Q. OK. Do you see in the last paragraph of this e-mail -- and
- 13 | you know Mr. Bowman is the head of MLBAM, is that right?
- 14 A. Yes.
- 15 \parallel Q. OK. Do you see in the last paragraph of this e-mail,
- 16 Mr. Bowman says: Advancing this point one more inch, yes, I do
- 17 | believe that it is anachronistic and a dying sport to black out
- 18 games via the Internet in the local market. RSN advertisers
- 19 | will actually get a higher CPM from Internet delivery of the
- 20 Red Sox games. The MSOs will love you, more of the costs, they
- 21 | will add broadband subscribers, a far more profitable business,
- 22 | and most important your fans will love you for opening up
- 23 | channels.
- 24 Did you consider that e-mail in coming to your
- 25 | conclusions?

- 1 A. I don't recall reading that, but it's entirely consistent
- 2 | with all of my conclusions. Why? Because the circumstance in
- 3 | which the same controller will be now deciding on prices over
- 4 | the Internet and to the MVPDs. So, this is not undermining
- 5 | anything I have said.
- 6 Q. OK. Now, one of your clients in this case is Madison
- 7 | Square Garden, is that correct?
- 8 | A. Yes.
- 9 Q. Could you look at the next exhibit.
- 10 A. Well, can I just clarify? I understand that Madison Square
- 11 | Garden is one of the defendants. I don't think they're my
- 12 | personal client, so I just want to make sure that distinction
- 13 | is on the record.
- 14 | Q. But you are testifying on behalf of all of the defendants
- 15 today.
- 16 A. That is true.
- 17 | O. OK. And certainly all of their documents were made
- 18 | available to you.
- 19 A. That is true too.
- 20 Q. OK. Would you take a look at Exhibit 18, please.
- 21 \parallel A. I have it.
- 22 | Q. This is a complaint that Madison Square Garden filed
- 23 | against the National Hockey League, is that right?
- 24 | THE COURT: That's what it says; that's the caption.
- 25 A. Yes, that's what it says right here.

LAU2 Ordover - cross

- 1 | Q. OK. Would you turn, please, to paragraph 16, 16C.
- 2 | A. OK.
- 3 | Q. And you see it's entitled "Excessive League Control Over
- 4 | Individual Club Broadcasting and Other Distribution
- 5 Opportunities." Do you see that?
- 6 A. I see that headline, yes.
- 7 | Q. And you see looking down at the third sentence, among other
- 8 | things it says, "At the same time, the NHL members clubs,
- 9 acting collusively as the league, and through the commissioner,
- 10 have restrained the individual clubs' broadcasting and other
- 11 distribution opportunities, and in doing so eliminated
- 12 | competition among the clubs in ways that are not reasonably
- 13 | necessary." It goes on. And I'm not going to read it all to
- 14 you, but I would like her Honor to see what it says there.
- Then I would like you to look at paragraph 42. OK?
- 16 A. 42 in the same complaint?
- 17 | Q. Yes.
- 18 | A. Yeah OK, I see 42.
- 19 Q. You see it's entitled the section, "The Agreements of
- 20 Restraint Horizontal Competition Have Had Anticompetitive
- 21 | Effects and Led to Consumer Harm." Do you see that?
- 22 A. Yes.
- 23 Q. Among the things they say in paragraph 42, looking at the
- 24 penultimate sentence, "The teams would compete with each other
- 25 and with the NHL in broadcasting, rebroadcasting, and other

in the case.

that correct?

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distribution of NHL games, apart from any national broadcasting contract, game highlights and game footage in a variety of media and further in the operation of their websites, " that is, in the event that these restrictions were lifted by the court

Did you see that before you came to your opinions

based on the declarations of certain of your clients? A. But, sir, my opinions are going to the issue of class certification. I am expressly prohibited to discuss the merits. I'm not talking about the merits. I am talking about -- let me finish -- I'm talking about the implications of those removals on different types of subscribers to the current league packages. That's the whole grand total of my testimony. Q. You think there will be winners and losers because the competition will occur in a certain way that you define, is

- I believe there will be winners and losers because in the "but for" world there will be fees that the users of the now-available fees will have to pay to access them.
- 20 Would you look at paragraph 27D. Sorry, page 27, paragraph 0. 21 D.
- 22 Α. Yes.
- 23 Madison Square Garden says, "Output of broadcast, 24 rebroadcasts, and Internet and other distribution of NHL games, 25 as well as the output of game highlights, is lower, and prices

- are higher than they would be in the absence of the exclusive 1 agreements. Adverse events exist." And it goes on to describe 2
- 3 it, and it says that prices would be lower if those
- 4 restrictions were removed. Is that right?
- 5 A. The prices -- some prices would be lower. And the whole
- 6 purpose of my testimony was to examine whether all prices would
- 7 be lower. And my view is they won't be. And in particular the
- 8 price of the packages may be higher. In fact, the packages may
- 9 not exist.
- 10 OK. Now, on MLB.tv you can pay for basic or premium
- 11 service, isn't that right?
- 12 I beg your pardon?
- 13 You can pay for basic or premium service, is that right?
- 14 Α. Yes.
- 15 Q. OK. The basic service costs \$109, is that right?
- THE COURT: Would you remind me, is this Internet? 16
- 17 MR. LANGER: Yes.
- 18 THE COURT: And \$109 a year?
- 19 MR. LANGER: Yes.
- 20 THE WITNESS: The season is a year? It doesn't make
- 21 any difference.
- 22 MR. LANGER: The season. I mean a season.
- 23 THE COURT: The whole season.
- 24 The whole season, the premium is \$129, is that right?
- 25 Α. Yes, sir.

- And the principal difference you say in your declaration 1 between the premium and the basic is that the premium gives you 2 3 a choice of watching either the home team feed or the visiting
- 4 team feed, is that right?
 - That is true. Α.

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So people are willing to pay \$20 more per season -- which is a significant amount more, considering the prices here -- in order to get the choice of feeds, is that correct?

THE COURT: You mean for the same game, right? MR. LANGER: Correct.

- A. Yes, the actual game is the same, but it's announced by different people, there may be additional programming associated with it. The answer is, yes, some people are but not everybody.
- Q. Well, you testified that the majority of people are willing to subscribe to the premium package, didn't you?
- I don't recall the testimony. I would have to be refreshed. I'm sorry.
- 19 Would you look at page 179 of your deposition.

20 THE COURT: Where do I find the deposition?

MR. LANGER: Bear with me, your Honor. It is number 3 in the black book of depositions.

THE WITNESS: I think it's the big binder here.

I only have one white binder. I don't THE COURT: have the second white binder. Oh, now I do, if I can lift it.

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THE WITNESS: Number 3? Got it.

- OK. I asked you --Q.
- 3 THE COURT: What page.
- 4 MR. LANGER: 179.
- 5 THE COURT: 179.
 - I asked you: "What proportion of people do you know who purchased the MLB packages purchased the premium package?"
 - Do you see that?
- 9 I see that. Α.
- 10 And you answered: "As I sit here, I cannot tell you.
- 11 think that the premium package is the one that is more
- 12 frequently bought."
- 13 Is that right?
- 14 A. The first sentence says: "As I sit here, I cannot tell
- 15 you." So, it's quite clear that I don't know the exact numbers
- 16 or the distribution.
- 17 THE COURT: Well, he didn't ask you exact numbers, but
- 18 the bottom line is you said I think the premium package is the
- 19 one that is more frequently bought. All he is asking is that
- 20 what you said.
- 21 THE WITNESS: That's what I said, it's right here in
- 22 plain English.
- 23 THE COURT: OK.
- Now in your declaration you talk about all about this 24
- 25 crucial aspect called exclusivity, right?

- Yes, content exclusivity.
- Content exclusivity. Is content exclusivity -- am I 2 Q.
- 3 correct when you begin describing it you describe what Fox does
- with the World Series, is that right? 4
- 5 A. I have an example of the fact that the World Series --
- again this would be on Fox. 6
- 7 Q. And in the case of the World Series there is only one game
- playing at that time. Is that right? There aren't other 8
- 9 baseball games playing at the time of the World Series.
- 10 That would be my understanding, yes. Α.
- 11 So what Fox is buying is essentially what you would call
- 12 sport exclusivity. They have the right to broadcast the only
- 13 baseball game that day that the World Series is playing, is
- 14 that right?
- 15 I never used the term sport exclusivity. You are the
- ones -- you and Dr. Noll are the ones who introduced that 16
- 17 concept of sports exclusivity.
- 18 THE COURT: But his underlying fact is correct, that's
- 19 the only baseball game that night.
- 20 THE WITNESS: That is true, but you call it sports
- 21 exclusivity.
- 22 THE COURT: I don't care.
- 23 Then there was a concept called game exclusivity, is that
- 24 correct?
- 25 Yes. That's not my concept either, but I heard that used.

- 1 And that's the idea that no matter what feeds there are, or 2 whatever, only one team has the right to broadcast that game in
- 3 one area.

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- I think that's the definition that's being used, yes. 4 Α.
- 5 Q. And then you have an area called content exclusivity, is that right? 6
- 7 That is true. Α.
- And that's the only area of exclusivity that you have 8 9 examined, is that right?
- 10 That is true. I focused on content exclusivity and the 11 implications for content exclusivity of the "but for" world 12 that Dr. Noll constructs or you construct.
 - Q. Now you had a chart up there in which you said it would be irrational for somebody to give away content to someone else who would distribute that content.
 - THE COURT: Well, to a competitor. It would be irrational to give it away for free to a competitor.
 - MR. LANGER: Right.
- 19 And I think at your deposition I think you told me it would 20 be "lunacy of the highest order". Is that right?
- 21 I might have been on my high horse at that time. Yes. 22 think -- I would say it makes no economic sense, unless you get 23 something in return, to give your content or any scarce asset, 24 valuable asset, to your rival for free.
 - Look at Exhibit 6, please.

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THE COURT: Which book? Black book?

MR. LANGER: Black book, 6.

THE WITNESS: Give me a second.

THE COURT: While he is doing that, it's a November 2, 2004 memo from somebody named Chris Tully to all the major league executives and broadcast directors and counsel. Who is Chris Tully? Does anybody know?

MR. LANGER: I'm not sure actually.

THE COURT: Well, if anybody is willing to help me, who is Chris Tully?

MS. WILKINSON: Yes, he was the head of media broadcasting for the league, your Honor.

THE COURT: Thank you.

- Q. Attached to this memo are the required language for both local television telecasts -- for television telecasts and for radio broadcasts, is that right?
- A. Well, I have to read it. I don't know.

THE COURT: Well, that's the title. I see it. That's the title. We can move on. That's the required language for local telecast agreements as of November 1, 2004.

- Q. Do you see it has a section on copyright?
- THE COURT: Yes. I don't need for him to answer that. Yes, I see it says copyright. Next.
 - Q. And it shows that the copyright is retained by the team, which is the ownership. Is that right?

- 1 A. That's the ownership in the game.
- 2 | Q. And the RSN is hired under the terms of the copyright law
- 3 as someone who is constructing a work for hire for the team, is
- 4 | that correct?
- A. I guess. I will have to read it, sir. I'm not a copyright
- 6 expert.
- 7 THE COURT: Well, the parties acknowledge and agree
- 8 | that each of the work shall constitute a work made for hire.
- 9 A. As I say, I would have to read it.
- 10 | THE COURT: I know. I just did.
- 11 Q. And you see that for hockey -- excuse me, not for hockey --
- 12 | for radio it has the exact same language under copyright. Do
- 13 you see that?
- 14 | A. No, I don't.
- 15 Q. On the bottom it's page 12952.
- 16 THE COURT: Required language for radio broadcast
- 17 | agreements as of November 1, '04, section A, copyright, the
- 18 parties acknowledge and agree that each of the work shall
- 19 constitute a work made for hire. OK.
- 20 | Q. OK. Then going to page 12947.
- 21 THE COURT: Yes.
- 22 \parallel Q. This is where it describes how -- this is the local
- 23 regulations which require, without me getting into it, for
- 24 | there to be an exhibit to a contract?
- 25 | THE COURT: Right, it says MLB local telecast

- regulations, it's Exhibit A to the contract. 1
- 2 You will see it says game telecast feeds and excerpts?
- 3 I see that. Α.
- 4 Do you see that it requires the RSN to provide the team Q.
- 5 contemporaneously with any feed without any charge?
- I see that, yeah. 6 Α.
- 7 OK. And if you look at the regulations for hockey --
- excuse me -- for radio -- I keep saying hockey. I'm sorry --8
- 9 on 2957 -- excuse me, wrong page here. Sorry -- on 2956?
- 10 Α. 2956?
- 11 Ο. Yes.
- 12 Α. OK, got it.
- 13 Q. You see it has substantially similar language, is that
- 14 right?
- 15 A. Well, I don't know, but you're going so fast I don't even
- 16 have a chance to find the paragraph.
- 17 THE COURT: OK, 2956 is Exhibit A, radio broadcast
- 18 regulations. Number 2 says game broadcast feeds and excerpts,
- 19 and it says shall provide without any charge.
- 20 Do you see that? 0.
- 21 Upon the request, yes, without any charge, yes. Α.
- 22 Q. Now can you turn to Exhibit 7, please.
- 23 THE COURT: 7. OK, the next exhibit. OK.
- 24 Α. OK.

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Do you see that game day audio -- which is the radio Q.

version of the package --

2 Yes. Α.

- 3 Q. -- provides that it will be provided on a non-blacked-out
- 4 basis to people who want to pay for it, in contrast to the
- television in which it is blacked out? Do you see that? 5
- I presume you are able to locate the real document. I can 6
- 7 barely decipher it.
- It says right at the top: Listen to every 2015 regular 8
- 9 season and post-season game live online with no blackouts. Do
- 10 you see that?
- 11 Now that you told me to look for it, yes, I can try to see
- 12 it.
- 13 You see they are charging \$20 a year for that, \$19.99?
- 14 Α. Yes.
- 15 Q. And this is a circumstance exactly what you say would not
- happen, where a team is providing -- excuse me -- where the 16
- 17 broadcaster is providing the team with the feed, and the team
- 18 is then broadcasting it in the very same market where the radio
- station is. Is that correct? 19
- 20 That is correct, but it's not at all contrary to what I
- 21 said.
- 22 I see. OK. Let's go to Exhibit A, please.
- 23 Α. OK.
- 24 These are the hockey regulations regarding radio.
- 25 see that?

Yes, I see that, hockey.

- And it says, "Station agrees to provide such designee as 2 Q.
- 3 the club or club shall authorize, or require free of charge all
- live feeds and recordings of the club's productions." Do you 4
- see that? 5

- 6 A. Yes. Can you tell me where it is so that I can orient
- 7 myself?
- THE COURT: B, grant of rights. The third line, free 8
- 9 of charge, all live feeds.
- 10 In the NHL for radio they're required -- the radio station Ο.
- 11 is required to give the team the feed for free, is that
- 12 correct? The live feed. Isn't that correct?
- 13 THE COURT: Station agrees to provide such designee,
- the club, free of charge all live feeds. 14
- 15 THE WITNESS: Yes, it says that.
- 16 THE COURT: OK.
- 17 It's entirely consistent with my analysis, yes.
- 18 Then if you go to Exhibit 9, this is I represent to you the
- 19 description of the NHL app on iTunes?
- 20 Α. Yes.
- 21 Do you see there it says under description, where it says
- 22 free features include live game audio from every game, no
- 23 blackouts? Do you see that?
- 24 Α. Yes.
- 25 And again here is a circumstance in which the NHL, just

- like baseball -- only it's better here because it's even 1 free -- is taking from the radio station their feed and giving 2
- 3 it away for free in the market in the Internet? Is that right?
- 4 That, as I said, is entirely consistent with my views
- 5 because the economics underlying the decision has been likely
- 6 to be negotiated out and decided upon in view of the overall
- 7 benefits of doing so.
- Q. But you said it would be the height of lunacy -- that was 8
- 9 your testimony -- the height of lunacy for somebody to give
- 10 someone a feed?
- 11 THE COURT: Not someone, a competitor.
- 12 A competitor a feed for free, which it was then going to
- 13 give away in the same market. Isn't that correct?
- 14 A. Well, first of all, you have to establish that the radio
- and the live game show on television or over the Internet are 15
- in the same market, which you have not established yet at all. 16
- 17 Excuse me, I'm not saying the television. I'm saying there
- 18 is a radio broadcast in New York City of a Yankee game.
- 19 Α. Yes.
- 20 Well, it's not a good example, but we will take
- 21 that -- of a Yankee game -- and the Yankees then insist that
- 22 that station -- well, let me use a different one. There is a
- 23 radio broadcast in Philadelphia of a Phillies game.
- 24 Α. OK.
- 25 And that station that's broadcasting the game is required

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to give the Phillies that broadcast, is that right, contemporaneous with that broadcast. The Phillies then turn around and then give it to the league, which sells it in Philadelphia to the very same people that that radio station is trying to attract to listen to its station. Isn't that correct?

- A. You know, I really don't have a full grasp of all of those flows that you are instancing, so why don't we try to make it simple. There is a game, there is a telecast of the game, and there is also audio cast, and under the agreements -- which then are reflected in the rates, in the prices that various economic agents in that environment pay -- these transfers for free or some other consideration are calculated. So, the amount --
- Why can't that be done in other sports like hockey on television and baseball on television? Why is it limited to the radio that they can negotiate this and it becomes a rational economic situation, but you say that when you come to baseball on television and hockey on television it suddenly becomes an irrational circumstance?
- A. Because you uttered the key word: Negotiated out. And this is exactly what I have been writing about, which is to say if there is a negotiation, then the prices will be arrived that reflect both sides' economics and, therefore, will not entail the taking of the scarce and valuable right for free, without

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Ordover - cross

- there being a negotiation. I am perfectly happy to say that
 you negotiate the price that is zero as long as it is a
 negotiated price.
 - THE COURT: OK. Let's take the ten-minute recess now.

 We're halfway through yours. You have gone 30 minutes. Let's take the ten minutes, and then you will finish up. OK.

(Recess)

- JANUSZ ORDOVER, resumed.
- 9 | CROSS-EXAMINATION (Continued)
- 10 BY MR. LANGER:
- 11 Q. Dr. Ordover, would you go to paragraph 31 of your declaration, please, page 18.
- 13 THE COURT: Which exhibit is that again?
- MR. LANGER: That is Joint Exhibit 5, your Honor.
- THE COURT: Joint Exhibit 5, page 18. OK.
- 16 | Q. Do you see that?
- 17 | A. Not yet. Which page?
- 18 | Q. Page 18, paragraph 31.
- 19 A. Yes.
- 20 Q. OK. You say consistent with economic efficiencies, so
- 21 | forth and so on, that this content exclusivity is prevalent in
- 22 other sports. Is that right?
- 23 | A. Yes.
- Q. OK. But let me ask you, you have a footnote for the
- 25 National Basketball League, but how do you know that it is

- Ordover cross
- exclusive in this fashion with motor racing? 1
- 2 I'm sorry. Α.
- 3 It says that content exclusivity exists for Indy car racing
- 4 and NASCAR racing. How do you know that?
- 5 Well, I had my team do Internet research on the available
- 6 information regarding those contractual arrangements, sir.
 - You checked those. Did you check what your team did?
- 8 I do recall checking things, yes.
- 9 Q. Well, how is it done? Do they block it out on the
- 10 Internet? Do they charge on the internet? Is it done
- 11 geographically? How do they handle it in Indy car racing?
- 12 A. As I sit here, I cannot tell you. At the time of the
- 13 report I likely knew the details, but now we just have a
- 14 report.

- 15 And that would be true of NASCAR as well, you wouldn't know
- how it's done? 16
- 17 A. As I sit here I don't recall how it was done, but I can go
- 18 back on the Internet and verify it.
- 19 Q. You don't know whether it involves geographic restrictions
- 20 like those involved here.
- 21 Α. No.
- 22 Q. How about English Premiere League soccer, do you know how
- 23 that is blacked out or how that content exclusivity is
- 24 preserved? Is it national across England? Can I watch a game
- 25 in New Castle when the New Castle game is playing in London?

- How does it work? 1
- As I sit here, I don't know the details. I just provided 2
- 3 some information that I believe is consistent with the facts,
- 4 and I would be very happy to go back to the Internet and verify
- 5 the statements, but I don't know about those facts as I sit
- 6 here.
- 7 Q. The fact is you have cherry picked, have you not, the teams
- and sports that you show, and that there are a number of sports 8
- 9 that don't black out and have feeds in the very market that you
- 10 say nobody other than someone engaging in the height of lunacy
- would be involved in, isn't that correct? 11
- 12 I will be happy to talk about those instances if you
- 13 provide me with the relevant documents. I'm not going to be
- 14 subscribing to your statements, because I haven't the faintest
- 15 idea what you are talking about.
- O. Let's look at Exhibit 11. 16
- 17 THE COURT: Which book?
- 18 MR. LANGER: The black book, your Honor.
- 19 Exhibit 11 is the website for American Major League soccer,
- 20 not English soccer. Do you see that?
- 21 Not yet. I haven't gotten to it. Α.
- 22 And this is the package that people buy, correct?
- 23 Α. Yes.
- 24 And you see on the third page it shows you the blackout
- 25 policy. Do you see that?

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Ordover - cross

1 THE COURT: I don't yet.

> MR. LANGER: It starts on the second page, on the bottom, your Honor, 2 of 4.

> > THE COURT: I see.

- Then on the third page do you see Philadelphia union there? Ο. THE COURT: Yes.
- Α. Yes.
- And I have a bias towards Philadelphia even though I grew up in New York. That what happens I guess over time. But do you see where it says no local blackouts? Do you see that?
- 11 That is true, but there are other entries which say there 12 are blackouts.
 - Right. But it would be the height of lunacy for the team 0. that has the rights for the Philadelphia team, for the RSN to give them for free to major league soccer to sell in competition with them, wouldn't it?
 - A. No, if they had negotiated the right price, that reflects the absence of the blackouts.

THE COURT: He used the word "for free" in his question, "for free, in other words they have negotiated a price of zero.

THE WITNESS: Well, yes, but there is a potential price between the other agents that are participating in this particular sport in terms of what it is their roles are, so I can understand the circumstances in which there is a negotiated

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Ordover - cross

- 1 result, a zero price, which is then reflected in other terms as 2 well.
 - Now if you turn to the next page, do you see that's the schedule for the Philadelphia union. Do you see that?

THE COURT: No.

MR. LANGER: Oh, I'm sorry, Exhibit 12.

THE COURT: Exhibit 12. OK.

THE WITNESS: Yes.

THE COURT: We see.

- And you see it shows you what stations the games are being
- 11 broadcast on. And if I represent to you that TCN stands for
- 12 the Comcast Network and CSN stands for Comcast Sports Net.
- 13 It's your own client, Comcast, which is furnishing feeds back
- 14 to the team, that the league is then selling in competition
- 15 with Comcast in Philadelphia. Is that correct?
- That is true, but the amount of money that Comcast paid for 16
- 17 that kind of limited rights will reflect the fact that the team
- 18 or somebody can be selling those rights in competition. So I
- 19 would have to go back to these contracts, look at the
- 20 arrangements and understand the transfers of funds that will
- reflect the kind of relaxations or changes in the competitive 21
- 22 environment that you are talking about.
- 23 Q. Look at Exhibit 13. This is the American Hockey League.
- 24 Do you see that?
- 25 Α. Yes.

- Ordover cross
- 1 Their website. And they advertise every game, every team,
- if it's on, it's on AHL live. And they charge for that, right? 2
- 3 That is true. Α.
- 4 No blackouts. 0.

- 5 I guess no, at least not based on this document.
- 6 You selected Indy racing, and you selected NASCAR OK. 0.
- 7 racing, but you did not show motorcycle racing, did you?
 - That is true, I did not show motorcycle racing.
- 9 Because you knew that motorcycle racing is available on a
- 10 non-blacked out basis in the very same markets that Fox
- 11 broadcasts on television, didn't you?
- 12 No, I didn't know that.
- 13 Q. You didn't know that? Well, you can look at Exhibit 14 in
- 14 your spare time. OK? I don't want to waste our time here
- 15 todav. And exhibit 15 shows that it's on Fox on television.
- And because I didn't know much about the sport myself, I 16
- 17 attached some further documents explaining.
- 18 Now, your assumption -- well, let's get to that. OK.
- You say just what you said, that people would negotiate a lower 19
- 20 arrangement in the event that the rights were not exclusive in
- 21 the same fashion. Is that right?
- 22 That's true, I do believe that the fees or the other
- 23 payments that the parties would negotiate would reflect the
- 24 scope of the rights that is being conveyed. I think that's
- 25 straightforward.

- Ordover cross
- I have summarized, because time is running short -- I have 1
- summarized on Exhibit 23 the content of Exhibits 22 and 24. 2
- 3 OK? And this is highly confidential, so I'm going to speak
- about it in the abstract. 4
- 5 That's in the black book? OK.
- But I represent to you that the back-up for these two 6 7 charts are Exhibits 22 and 23.
 - THE COURT: Which exhibit am I looking at?
- 9 MR. LANGER: 23, your Honor.
- 10 THE COURT: 23 is the summary of two others?
- 11 MR. LANGER: Yes.
- 12 THE COURT: Which is 23 the summary of?
- 13 MR. LANGER: It's the summary of the combination of 22 14 and 24.
- 15 THE COURT: Oh, 22 and 24.
- 16 MR. LANGER: And 25.
- 17 THE COURT: OK.
- 18 Do you see that it shows what the cost of producing a
- 19 baseball or hockey game is? Do you see that?
- 20 Yes, it gives sets and figures. Α.
- 21 Q. \$40,000 to \$50,000.
- 22 THE COURT: I don't see that.
- 23 MR. LANGER: Sorry. My pages are out of order here.
- 24 They tell me it's 22. OK, it's 22, your Honor.
- 25 THE COURT: I should be looking at 22.

Ordover - cross

- 1 MR. LANGER: My book is out of order.
- 2 THE COURT: That's OK. So 22 is the summary chart.
- 3 MR. LANGER: Yes. May I approach the witness?
- 4 MR. LECKMAN: It's the last page on Exhibit 22.
- 5 THE COURT: OK, I see it. It's called "Cost to
- Produce Sports Telecast." Got it. 6
- 7 MR. LANGER: It should have been part of Exhibit 23.
- THE COURT: That's OK, we have it now, both of us. 8
 - It says it costs \$40,000 to \$50,000 to produce the game.
- 10 Do you see that?
- 11 Α. Yes.

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- 12 And it gives the support for that, OK?
- 13 Α. Yes.
- Something from hockey, something from baseball. And you 14 Q.
- 15 can see it's comparable if you look at the documents. OK?
- 16 Α. OK.
- 17 Q. And that's the cost of what it costs just to produce the
- 18 game, OK?
- 19 A. OK.
- 20 Then the next page is entitled "RSN Payment For Right to
- Telecast." Do you see that? 21
- 22 THE COURT: Yeah, and that's in our books under
- Exhibit 23. OK. 23
- 24 THE WITNESS: OK, I don't see it yet.
- 25 THE COURT: Just turn to Exhibit 23, and you will see

Ordover - cross

- 1 | it. "RSN Payment For Right" --
- 2 THE WITNESS: OK.
- THE COURT: We're there. We're both there. "RSN
- 4 Payment For Right To Telecast." OK.
- Q. And do you see that it shows that for one team, the first
- 6 one, the RSN is willing to pay \$280 million over a period of
- 7 | years, which comes to \$1.87 million per game to broadcast that
- 8 | team's games? Do you see that?
- 9 A. I see that, yes, sir.
- 10 Q. And do you see that even for a small team that has
- 11 | negotiated a small package in terms ever dollars it comes to
- 12 | \$18 million a year and \$120,000 per game? Is that right?
- 13 A. That's true.
- 14 | Q. So don't you think -- then if look at hockey you will see
- 15 | similar stuff. OK? Do you see that?
- 16 | A. Yes.
- 17 | Q. Don't you think if her Honor granted the relief plaintiffs
- 18 sought here, that the first thing that would happen is just
- 19 | what you described that would happen in these other sports,
- 20 | that the RSNs would negotiate down these exorbitant fees for
- 21 | the games that they're paying, these blanket fees, because
- 22 | they're getting fewer rights? Isn't that the most likely
- 23 | event?
- 24 | A. I would expect all kinds of negotiations to take place to
- 25 account for the changed competitive environment.

- And that's how these negotiations occur, individually 1 OK. between teams and RSNs, right? They each negotiate separately. 2
 - That is true, those are one-on-one negotiations.
- 4 Now, you did a model, is that right, that you described Ο. 5 before, this one cent, one cent, one cent business. Do you
- recall that? 6

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- 7 A. Yes, I constructed an approach for the purpose at hand.
- It's not necessarily the approach one needs in the context of 8 9 what you are telling me now.
- 10 Q. And in that context her Honor asked you a question. She 11 said wouldn't the Yankees negotiate for a higher fee for their

feed than the poor Mets will?

- I would expect, yes, that those prices would be higher, reflecting the attractiveness of the team. However -- and here is the reason why I didn't do it this way -- because I had no ability to calculate exactly the fee that would be agreed above the base level of 17 cents between the Yankees and the league.
- Q. But when her Honor asked you, you told her there wouldn't be a difference, that the Yankees would not be able to get more for that fee, that everybody would pay the same fee.
- In this particular set-up that I have introduced I was limited to being able to do certain type of calculations, not all kind of calculations. I could not tell you based on the information I had what it is that the Yankees and the Major League Baseball would negotiate out. I can simply tell you,

7LAU2 Ordover - cross

- and I can stand by it -- and Dr. Noll has not dented that

 calculation one iota -- that the minimum amount they would

 negotiate for is 17 cents per view, per subscriber.
 - Q. But when her Honor asked you, she asked you whether the Yankees could realize their value, and you told her, no, all the teams were going to get the same thing, you didn't tell her it was limited it in this way.
 - A. I think I was fully explaining my reason. And I thank you for your question, because it only gives me a chance to make it even clearer. I was always saying that this is not -- I repeat, this is not the fee that actually would necessarily emerge, but I can tell you the basis of my calculations remain unchallenged.
 - Q. You say that your model -- you said in your direct testimony that your model was based on the Crawford Yurukoglu model, is that right?
 - A. Well, actually there are preceding papers to that as well that I cite.
 - Q. In fact you don't cite the Yurukoglu model, you cite a different model in support of this, if you look at footnote 50 to your report.
 - A. Right. But that is then cited again in C&Y. If I were submitting this paper for publication, I would probably be more detailed with the bibliographic citation. That's what people do when they send the articles to the American Economic Review.

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Ordover - cross

- Q. You say you based it on this article by -- I really can't pronounce the first name, so I will call it Nevo and Karim. Is that right?
 - A. Yes, but that's the later article. That's not the --
 - Q. This article that you have as footnote 50 is the support for your model, isn't it?
 - A. Yes.
 - Q. It's the only support you cite.
 - A. Yes. Sorry to interrupt. Yes, that's the support. But if you go back to that article, it cites a number of other papers that discuss the issue of bargaining in the multi-party context.

(Continued on next page)

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BY MR. LANGER:

- You tell me how you followed this article, this approach, do you do all of the same things that the people in the Karim article do in your model or do you depart from it?
 - A. I believe I follow the basic issue -- basic approach relating to bargaining. That paper covers a lot of other things that are irrelevant to my task at hand. All I wanted to do was to figure out how to calculate out the minimum fee that the league would be paying to the teams.
 - Tell us how you did it in terms of what did you draw from the article? What specifically did you draw from that article Can you tell us. for your model?
 - Absolutely. I'll be happy to do that. A. Yes. Sure. don't have a chance first time around.

So what I drew from it is that the -- you have a context or circumstance, your Honor, in which there's one party called the league that has to bargain for the rights fee with a number of counterparties. In a straightforward bargaining model, it's I and Mr. Burke bargaining over my fee, and we do it one and one. But how do we approach the circumstance in which I have to bargain with all the lawyers in some fashion that is coherent, that makes economic sense that is implementable in terms of understanding what the outcome is going to be? And that's not a trivial question. It turns out to be a very difficult question.

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Economists have developed a technique of dealing with this, game theorists, bargaining theorists, to develop a technique to deal with it and they deal with it in the following way: The negotiations starts with between me and a Lawyer 1. In the background, all the other negotiations are held constant and we bargain for the fee. After I get -- after that gets done, in my paper actually we bargain for an agreement whether to increase my fee by a penny, okay. don't bargain for the end result of the fee. We are bargaining starting from some baseline, let's say \$5 an hour. We are bargaining whether or not the lawyer or his client will be willing to pay me \$5 and a penny.

And if there's agreement is struck or simultaneous with that agreement there are 29 other agreements going on -taking place exactly the same time, there is no communication between the lawyers. And the only thing that is being decided is whether or not they're all going to agree to a penny increase.

If everybody says okay, we willing to pay Ordover \$5 and a penny, then the negotiation moves to the next phase. the next phase we start everybody paying me \$5 and a penny and we go up by a penny. And we keep on going up by a penny up until such time that some lawyer/Ordover team or pair will say no, I'm not willing to pay him more than \$5.15 or \$5.17 as we had it on the board, and that's how it works.

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That's the sort of, I don't know, gold standard. the moment it is, I believe, the standard approach to a negotiation in which I, the single person, am bargaining simultaneously with a number of counterparties.

- Q. Dr. Ordover, I had not asked you that. I asked you and I'm not going to press it again - I asked you what you took from this article and what you didn't take from the article, but I'm going to move on now, okay?
- Α. Okay.
 - Are you aware of any negotiation at all where a sports league negotiates with its individual teams to pay those teams for any kind of intellectual property? Can you cite me to any example in any sport in which that occurs?
 - I believe that there are contracts in which the league or anybody on the other bargaining side of the table who is going to be negotiating with the sport teams or the league that's going to be negotiating with the distributers for the access to the intellectual property; there's nothing different between the league and the team as between the league and an MVPD for example.
 - I asked you whether there was any circumstance you could cite to her honor where what you say occurs; where the league negotiates with a team to obtain any form whatsoever of intellectual property. Can you give her Honor any specific example in any sport in the world?

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THE COURT: And stick with the league and the teams. Don't bring in any distributers because that was not in his question.

Do you know of any example of the leagues and the teams negotiating for intellectual property?

THE WITNESS: I cannot name a specific instance of that because I am not privy to what happens between the teams and the leagues. I just don't have access to those kinds of documents. But I do believe and there is evidence that the league will negotiate with teams for rights, and those rights may include intellectual property and other things as well. Somehow those payments are made and those payments are generally a result of bargaining or negotiation.

- You can cite no example to the Court; is that right? Q.
- Α. As I sit here, I cannot.
 - Okay. So there's no example that you can cite in which the kind of negotiation you claim will occur has ever occurred in sport before?
- That is not what I said. I cannot tell you of off the top of my head that --

THE COURT: I heard your answer. You said you can't come up with one example but you believe it's so. That's the answer. He believes it's so but has no example today.

Q. Now, you do a study that purports to show the cross-elasticity of demand among people between teams. Do you Ordover - cross

- 1 recall that?
- I looked at the peoples' viewing times. And I also 2
- 3 looked at people's -- the number of teams that they actually
- 4 count the number of teams that they watch; yes.
- 5 Q. Now, but in selecting the group that you studied, you
- 6 limited the number of people that you looked at. Am I correct?
- 7 I looked at the people, the size of the population that I
- worked with, what was available to me in order to be able to 8
- 9 implement this econometric regression models that I have
- 10 developed.
- 11 I don't want to waste time looking for the document, but
- 12 let me just ask you, you used in this survey of yours, this
- 13 study of yours -- the population you used was subscribers with
- 14 a strong favorite team preference, isn't that correct, those
- were the only people you looked at? 15
- That is true. 16 Α.
- 17 If you look back in your exhibits, that excluded the 40
- 18 percent of the market that didn't have that strong preference;
- is that correct? 19
- 20 That is true, but it included 60 percent that did.
- 21 Right. So it only included those people who already wanted Q.
- 22 to watch a favorite team and it excluded those people who might
- 23 watch a different team; isn't that correct?
- 24 That is true, but the question arises what are the
- 25 implications of that for the conclusions which I have drawn.

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THE COURT: The problem, Mr. Langer, is that your time is up.

> MR. LANGER: Okay. Thank you, your Honor.

THE COURT: Sorry about that. So we have a

five-minute redirect.

REDIRECT EXAMINATION

BY MR. BURKE:

Just a few things, Dr. Ordover. You were asked about whether you can think of any examples of situations where leagues charge teams a fee for their content.

Are you aware of any circumstances where a league appropriates the intellectual property of teams and uses it to compete with teams without providing any compensation to those teams?

I am certainly not aware of such a circumstance because I believe it would be totally inconsistent with the interest of the team.

MR. LANGER: I'm going to object to that guestion for a total lack of foundation. It's clear this witness does not know anything about sports and to ask that question of him is ridiculous.

THE COURT: I understand your objection, I do. I don't know that he has a basis to answer that other than If he can't give one example of it, I don't think he instinct. should be able to testify as to what he believes to be so or

F3iqlau3 Ordover - redirect

his instinct as to what is so because that is speculative. 1 2 MR. BURKE: I think I was just asking whether he was 3 aware of anything. 4 THE COURT: Tell him to name one. I don't think he 5 can. I think his testimony has been quite clear that he believes but has no evidence, so I'm going to sustain the 6 7 objection and strike the testimony. 8 MR. BURKE: So, just to be clear, again, the question 9 was whether he's aware of any situation. 10 THE COURT: Tell us one that you're aware of, any one. 11 THE WITNESS: I'm not. 12 THE COURT: I thought so. Then that's that. 13 MR. BURKE: Okay. 14 THE COURT: Okay. No more redirect? 15 MR. BURKE: No. Thanks. THE COURT: So, look, the schedule you wrote doesn't 16 comport with my dietary habits. I'd like to do the direct of 17 Dr. Pakes for an hour now and then take the luncheon recess; 18 otherwise it throws off the eating day. Don't tell me he's not 19 20 here. He is here? 21 MR. PARIS: He is. 22 THE COURT: Good. We do need a minute to close 23 notebooks and change notebooks. Thank you, Dr. Ordover. 24 THE WITNESS: Thank you, your Honor.

(Witness excused)

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THE COURT: You need to collect notebooks from

Dr. Ordover and from the Court. Where are the young, strong
ones: There they are. Young and strong.

According to the schedule, this direct is scheduled for one hour -- no, 50 minutes. It was scheduled for 1:00 to 2:00, so we'll do it from now until 1:05, fifty minutes, now until 1:05. Who is conducting this direct? Who is the lawyer conducting it?

MR. PARIS: I am, your Honor, Andre Paris.

THE COURT: Mr. Paris, thank you. While you're doing that, I'll swear the witness.

ARIEL PAKES,

called as a witness by the Defendants,

having been duly sworn, testified as follows:

DIRECT EXAMINATION

16 BY MR. PARIS:

- Q. Good morning, Dr. Pakes. I know we have to reorient that.
- 18 | First, did you prepare some slides to help you with your
- 19 testimony?
- 20 A. Yes, I did.
 - Q. Can we have the first slide up.
- Dr. Pakes, I'd like to start by reviewing your
- 23 credentials. What is your current position?
- 24 A. I'm a professor of economics at Harvard University.
- 25 | Q. Have you been awarded any prizes in the field of economics?

Pakes - direct

- Yes, I've been awarded some of them are up there I've 1
- been awarded the Frisch Medal from the Econometric Society; the 2
- 3 Distinguished Fellow of the Industrial Organizational Society
- 4 one year; and the fellow of the American Academy of Arts and
- 5 Sciences and other things.
- What is your field of expertise in economics? 6
- 7 Mostly, I study industrial organization, which is the study
- of markets. And I do -- I also teach econometrics sometimes, 8
- 9 statistical methods for economics.
- 10 Does that specialty also include structural models? 0.
- 11 Α. Yes.
- 12 How long have you been working with structural modeling?
- 13 Since my thesis. Α.
- 14 Have you authored papers on the field of structural
- 15 modeling?
- 16 Yes. Many. Α.
- 17 I understand that you're the author or coauthor of an
- 18 article called BLP for short, that's an approach to demand
- estimation. 19
- 20 Correct. Α.
- 21 Is that correct? Q.
- 22 Α. That's correct.
- 23 What's the significance of the BLP article in the
- 24 profession?
- 25 It showed how to analyze market demand and differentiate

- 1 product markets. That's a basic -- input demand systems are a basic input into the study of markets. 2
 - Did Dr. Noll rely on that in his analysis in this case?
- 4 Α. Yes.

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- 5 Has that article been relied on by other economists in the 6 profession?
 - It has thousands of cites. Yes.
 - Have you ever served as an editor or a referee for articles submitted to publication?
 - Referee all journals and I was an editor of the RAND Journal of Economics for about ten years which was at least at the time the premier journal in industrial organization.
 - What role do you play when you are the editor or referee for an article?
 - Typically I would get the article. You do a reasonably quick reading. You can throw out half the article right away because there's something wrong with them that you see. not, you send it to referees, usually one that's very knowledgeable of the industry of interest and one that's knowledgeable of the techniques. Get back the referee reports. If they're positive, you go over it very seriously and decide whether you want the paper, you want revisions on the paper,
- 23 but you're the final gatekeeper. You decide whether the paper 24 gets published or not.
 - How did you familiarize yourself with the facts at issue in

this case?

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- In a very similar manner. I read articles. I read 2 3 declarations. I asked questions. Very similar to what I would
- 4 do in that case.
- Q. Last question: Have you ever testified in court before as 5 6 an expert?
 - Α. Never.

represents.

to get to them.

- 8 THE COURT: Poor guy.
- 9 MR. PARIS: First time for everything.

to create a model of the but-for-world?

- 10 I'm just going to reorient this board up here so the most 11 important people can see it. Sir, can you tell me what this
- 13 I was asked to examine the article for whether the results Α. 14 from it would be robust or would be reliable in some sense or 15 there was some methodological flaws. So what I did, I investigated the issues that are on this slide. You're going 16 17
- 18 Q. We're going to go through them one by one. Were you asked
- 20 A. No, no. My only -- the only thing I was asked to do was to 21 find out whether Dr. Noll's model was reliable or not, whether 22 its estimates were reliable for the major things of interest.
- 23 And what methodology did you follow to determine that?
- 24 What I always do in these kinds of situations, which is, 25 you ask -- there's a situation -- there are things in the

- article they don't conform -- they aren't like reality. 1 what you do is relax them. No model is perfect, but you relax 2 3 the things that you know are not like reality. You see if a 4 major result of interest changes. If it does, it's not robust;
- 5 if it doesn't --

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- In your analysis here, did you relax all the assumptions at one time or did you do them --
- No. I just did them one at a time.
- So, let's get to your first item up there and talk about C&Y. Does Dr. Noll rely on the C&Y model as a basis for his analysis?
 - A. Well, when I read his report, it said he did, but in fact it doesn't. It relies on part of it, which is the part that's BLP and it doesn't rely on the rest of it, which is the innovation of the model.
 - Before we get into the C&Y model in detail, before this litigation, did you have familiarity with the analysis that became the C&Y article that was published in the American Economic Review?
 - A. Yeah. I was the thesis adviser for Yurukoglu, and the basis of that article is his thesis, and then they took it --
- 22 What was the question that C&Y studied in that article? Ο.
- 23 At the time that the article was written there was an issue 24 both at the FCC and in Congress actually about whether we 25 should debundle the tiers or make the tiers that cables have \grave{a}

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la carte; so you would force them to be sold à la carte and what would be the impact of that on consumers.

- Q. Let's look at the supply-side bargaining issue. What does the left side of the graphic represent?
- It represents C&Y's model. Α.

their returns to their investments.

- 6 And what does the reference at the bottom two mark-up and 0. 7 multiproduct pricing?
 - So that's what the -- so there are two levels, maybe I should go through it. Is that okay?
 - Ο. Yes.
 - There are two levels. First is the networks who add content, okay? They set a per-subscriber fee to the MVPDs. And that per-subscriber fee covers their marginal cost and their mark-up, their mark-up, which covers their investments,

The MVPDs then get these -- they get the per-subscriber fee which are their costs for the network material; they add whatever is their marginal cost to it. then they mark it up and sell it to consumers. And in the Bertrand pricing game, their mark-up covers their fixed cost, their satellites or their cable networks, cable in the ground, stuff like that.

THE COURT: Two quick questions. This has nothing to do with sports or it's not all sports anyway, right?

THE WITNESS: Yes. It's a general model.

1 THE COURT: The C&Y model is not sports network?

THE WITNESS: Not only the sports network.

3 THE COURT: Sports was in there, but it wasn't only

sports.

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THE WITNESS: Correct.

THE COURT: Also, this model was mixed content; is that true? In other words, it was sports, it was films, it was news?

THE WITNESS: Yes, it was mixed content. It was all content.

THE COURT: And it was various content providers?

THE WITNESS: Correct.

THE COURT: I just wanted to understand.

THE WITNESS: Fine. No, that's fine.

- Q. So, the bundling refers to the MVPDs selling as a package to the consumers?
- Correct. They put it in tiers and sold it. Α.
- 18 How did C&Y analyze the effects of unbundling?
 - They did it in two ways. The first way they did it was they held the costs of the networks of the per-subscriber fee that the networks charged the MVPDs is constant, made the MVPDs split everything up into à la carte offerings, and redid the demand and saw what the Bertrand pricing model again or
- 24 Nash-on-pricing model -- Bertrand is really Nash on prices,
- 25 Nash is the "Beautiful Mind" Nash, actually; it's that guy --

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- so, Nash-on-pricing model and consumers reoptimize. And they ask the question are consumers better off or worse off.
- And the first time when they did that analysis, what happened?
- Consumers were significantly better off.

situation between the networks and the MVPDs.

- Was that the end of their analysis? 0.
 - What happens is if in that case when they debundle, the amount of money that goes back to each of the component networks is much smaller because people only buy a little bit. So the networks essentially would go out of business if they did that, so they allowed for bargaining, a bargaining

They recalculated what's called a Nash and Nash bargaining solution, which you don't need to know what it is but it's a negotiation, it gives us a bargain. That sets new per-subscriber fees to the MVPDs. And with the new subscriber fees, the MVPDs did an à la carte offering to the consumers.

The results of that were that the fees went up dramatically, they would have to for the networks to stay in business. And the consumers actually ended up slightly worse off maybe -- you couldn't tell really, but they certainly weren't better off maybe slightly worse off, it wasn't significantly significant. So that was the major finding of the paper and the major contribution of the paper was this innovation of modeling where they went upstream and did the

- Pakes direct
- bargaining to determine the per-subscriber fee when an 1 2 institution changed.
- 3 Q. So you already talked about the fact that the C&Y did this
- 4 Bertrand pricing analysis. And at what point in the analysis
- 5 did they do the Bertrand pricing analysis, the Nash's pricing
- 6 analysis?
- 7 A. From -- the MVPDs sold their products, they now have a set
- of products that they sell at a multiproduct way to the 8
- 9 consumers.
- 10 How important was the supply-side bargaining analysis to
- 11 C&Y's model?
- 12 A. Again, two things: One, it flipped the major result of
- 13 interest, okay? So it's important, and it was the
- 14 methodological, that's the reason the paper is important.
- 15 Q. Did Dr. Noll apply the teachings of C&Y in his analysis
- 16 here?
- 17 Certainly not this part; no.
- 18 Q. Is Dr. Noll's model depicted on the right side of the
- slide? 19
- 20 I have it here. Yes, that's it.
- 21 First, why is the MVPD box grayed out in Dr. Noll's
- 22 analysis?
- 23 A. Dr. Noll assumes -- it doesn't assume anything. The MVPDs
- 24 don't enter Dr. Noll's model at all. They're just not there.
- 25 Putting up the rest of this, is it correct that Dr. Noll

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does not model bargaining between the MVPDs and the RSNs in his 1 2 model?

- There is no MVPDs, so there's nobody bargaining on it. They're not there.
- Q. Is there bargaining in Dr. Noll's model between RSNs and the teams?
 - A. No. He talks about a team RSN. Sometimes he has some narrative about it, but there's no actual model of how they interact.
 - Given what Dr. Noll was analyzing, was it a methodological flaw to not model the supply-side bargaining?
 - It's a methodological flaw. The reason it's an important methodological flaw is the closest paper to it, which is this C&Y article, but there was a subsequent paper that I've seen now at two conferences, and it's up on our website, which is just the RSNs, it's just both the RSNs; and they show that there in fact is bargaining. And all the results from the bargaining model go through it in that paper, including the double marginalization results.

So the double marginalization result is on the left side here. So the first mark-up was the mark-up from the networks to the MVPDs; and the second mark-up is the mark-up from the MVPDs to the consumer. So one covers the production cost of the content, one covers the investment cost of the firm. And the new paper actually estimates these mark-ups and

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it's about whether these mark-ups stick around even after you vertically integrate. The mark-ups are there definitely. do examples of divesting, of separating the RSN from the MVPD and the examples of the RSN being combined with the MVPD. times they find there was double marginalization. And the sort of -- to an economist, to an IO economist, that's not surprising. The surprising part was, even when they did vertically integrated, there was still double marginalization because the profit center still looked out for itself in some sense.

- What does that finding in that second C&Y tell you about the need to do supply-side bargaining analysis?
- It just -- it's a structure of the industry. And when you Α. do it, things change quite dramatically. Dramatically depends on what you mean by -- substantively I guess is the right word.
- On the slide it says that there's no MVPD cost mark-up or multiproduct pricing between MVPDs and consumers.

Is that consistent with the real world?

In the real world, the RSNs do not have the power to price anything, okay, to the consumer, that is. They have to go through an MVPD. So in the actual world, the RSNs are not setting prices. It's the MVPD is setting prices. The MVPD has to cover its costs. It's marketing many products at the same time, okay. And it has to have a mark-up or it can't sustain its investment activities.

- 1 Q. Did Dr. Noll do a Bertrand pricing analysis in this model?
- 2 A. Yeah, but it was the Bertrand -- Dr. Noll doesn't have
- 3 MVPDs, okay. So in that model, each RSN is pricing directly to
- 4 | the consumer. And they're all -- they're pricing just one
- 5 product directly to the consumer, so there's 30 of them, so
- 6 there are 30 prices being set, and there's another bundle
- 7 | market also.
- 8 | Q. Is there any problem with what Dr. Noll did with respect to
- 9 | his Bertrand pricing analysis?
- 10 A. It's just not -- it's -- it doesn't conform with reality.
- 11 | The RSNs don't set prices, don't have the power to set prices,
- 12 | so the prices are now going to be set by the MVPD, and it's not
- 13 | pricing a single product; it's pricing a bundle of products and
- 14 | it will take that into account when it's pricing.
- 15 \parallel Q. In your opinion, was it a methodological flaw to do the
- 16 | Bertrand pricing analysis at the RSN level and ignore the MVPD?
- 17 A. Yes. I haven't seen a paper that does this at least since
- 18 | BLP. There are many papers that have firms that sell multiple
- 19 | products, including BLP. There was -- there's General Motors
- 20 | that sells 30 cars. I have not seen a paper that does -- at
- 21 | least since there which is 20 years ago, everybody takes into
- 22 | account the multiproduct pricing incentives.
- 23 | Q. Dr. Noll said you don't need to do a bargaining analysis
- 24 | because double marginalization will occur. I think you just
- 25 | explained -- let me ask you: Does double marginalization occur

- in RSN distribution by MVPDs in the actual world?
- The answer is yes, at least if you believe Yurukoglu and 2
- 3 Crawford. I believe they do. There's definitely negotiations.
- 4 They negotiate between themselves and barter a contract.
- 5 way that -- whether that contract has in it a mark-up -- I
- 6 don't imagine how it could not have it in it. And Yurukoglu
- 7 and Crawford show that it does. So yes, I guess that's a long
- 8 way of saying yes.
- 9 Q. Is it your understanding that Crawford and Yurukoglu are
- 10 working with plaintiffs in this litigation according to Dr.
- Noll? 11
- 12 The report said that, so Dr. Noll's report said that, so I
- 13 assume it's right.
- 14 Q. Do you recall from Dr. Noll's testimony yesterday that
- 15 there were a number of hypothetical contract forms you said
- might be adopted in the but-for-world between RSNs and the 16
- MVPDs that would avoid double marginalization. 17
- 18 Has Dr. Noll given any reasons for RSNs to change
- 19 their current per-subscriber fee contract structure in the
- 20 but-for-world?
- 21 A. No. Indeed, in the but-for-world there are many more
- 22 reasons to have double marginalization than in the current
- world. 23
- 24 All of Dr. Noll's reasons for getting around the
- 25 double marginalization issue, they're based on the following

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If there's a producer of a product or a service who is thing: selling it to an intermediary, like an MVPD who then remarkets it, if there's only one good that the producer is producing and there's only one good that the MVPD is marketing, then it makes sense sometimes, okay, to devise a contract where we maximize the joint profits from the endeavor and split it somehow between the two.

So the way he was going to split it one way was he was going to say, well, just give a fixed fee to the producer of the service, and then let -- and then the marginal cost, and let the retailer remarket it at marginal cost, because that's one way of doing it, he had other ways of doing it, he had other ways on the board. That presumes that each side of this contract only markets one good. If the MVPD is marketing 30 goods, it's not in his interest to maximize the profits from this -- just this set of -- this contract unit, single RSN. He just will not do it. It's just not in his interest. And the RSN knows he won't do it.

As a result, he won't accept this kind of contract because it lets the MVPD price any way it wants, which will maximize its total profits and not the profits from this endeavor, so though there will be a per-subscribe fee which limits the MVPD can do.

Similarly, on the RSN side, the RSN is selling both to the MVPD and to the Internet. So if it let the -- if the price

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goes too low on its MVPD product, it cannibalizes its Internet product, people will move from -- and it doesn't -- so it will not do that; it has an interest in a different thing than the MVPD does.

So what Dr. Noll's assumptions for getting rid of double marginalization are based on are this issue that there's only one good that both of them are marketing. So the producer and the retailer or the distributor each only have one good. That's fundamental to doing it that way. And this is not the case in this industry.

- Thank you. Let's turn to issue number two, which is the multiproduct pricing. We heard some testimony about that. But can you briefly explain the multiproduct pricing principle.
- A. Yeah. It's easy to understand actually. This is one that's really easy. Let's assume there's two goods and each good is owned by one firm. So we divest Pontiac and Chevy from GM and we say they're pricing alone. How do you set the Bertrand price? You increase -- you keep increasing the price by a dollar. For every dollar increase price for all the people who stick around and don't leave, you earn another dollar; and then some people leave because it's more pricey and you lose the mark-up on those people.

So what Bertrand pricing does or Nash on prices does, is it keep on increasing the price until that just equalizes, and that's the equilibrium.

So now what happens if Chevy and Pontiac are combined in GM? So now GM is setting the price for both. They own both products. They get the profits from both products. So we do the same exercise again, say, for Pontiac. We increase the price of the Pontiac by one dollar. It gets a dollar from everybody who stays, and some people leave, but they don't lose the mark-up on everybody who leaves. Why? Because some of the people who leave go to the Chevy because it's also a family-sized car. So they'll keep increasing the price more until that equilibrium is established again. So that's what's going on in multiproduct pricing. You can — it's pretty easy to understand.

- Q. Is there agreement among economists on the impact of multiproduct pricing?
- A. Yes. You can the argument I just gave you, you can do that formally mathematically to show it has to increase pricing.
- Q. Does Dr. Noll incorporate multiproduct pricing into his analysis?
- A. No. That was rather striking to me that he didn't.
- Q. Did you analyze what would happen to Dr. Noll's prices if you incorporated multiproduct pricing?
- A. Yeah. I did what I'm going to do on every one of these
 things, which is, I left all the other assumptions exactly like
 Dr. Noll had them. So I took his demand system. I assumed the

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RSN give their feeds at cost to the MVPD. And the only thing I 1 changed was the MVPD now prices the group of products instead 2 3 of one product.

- I'm putting up on the board slide number three. This is Ο. your multiproduct pricing analysis?
- It's both mine and it compares it to Dr. Noll's single 6 7 product pricing analysis.
 - Column A is Dr. Noll's work and column B is your adjustment for multiproduct pricing. Is that correct?
 - It's what you get from Dr. Noll's model if you just shift his assumption from each individual RSN price to one
- 12 multi -- one MVPD pricing. I hesitate to say this is my model.
 - Q. Does the adjustment in column B, does that reflect an RSN margin or mark-up?
 - A. It reflects one mark-up still. There's only one mark-up in this game because it's just the RSN gives it a cost of the MVPD and the MVPD prices. So again, I tried to just do one of the assumptions at time.
 - THE COURT: When you did the first one, you told us Dr. Noll's justification and you said why you didn't accept it.
- 21 Did he justify his decision not to engage in 22 multiproduct pricing? I don't recall. Do you?
- 23 THE WITNESS: I can't -- I don't recall him doing 24 that, okay.
- 25 THE COURT: You don't recall any justification?

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package.

THE WITNESS: No.

THE COURT: Okay. Okay.

- Q. How does the adjustment for multiproduct pricing for the MVPD affect the price of the bundle?
- A. So you see that in the bottom of the table. So on the left-hand side column, at the very bottom, there's a but-for-world league bundle price, which is \$25 -- \$24.59 for Dr. Noll, which is about \$9 less than the current existing price on the market. When you do the multiproduct pricing, that goes up to 40 -- almost \$41, okay, which is \$7 more than -- over \$7 more than the current but-for-world league
- THE COURT: What are these multiproducts, just as a reminder?
- THE WITNESS: They're just the RSNs. So what the MVPD is marketing are the 30 standalone RSNs and the league bundle.
- THE COURT: The multiproducts, 30 standalone and the one league?
- 19 THE WITNESS: Yes. And this is exactly --
 - Q. Is the assumption that the MVPD is going to have 30 standalone products, is that your assumption or is that Dr.
- 22 | Noll's assumption?
- A. No. All these assumptions are Dr. Noll's. The only change is who is pricing them.
- 25 | Q. I note that the -- with that adjustment, the package price

is now actually lower than the standalone prices that you've calculated in many instances.

What does that tell you?

A. It tells you there's something seriously wrong with the demand system. So the package price, the package includes all the games. It includes all the teams. So if the package price is less than the price of the individual — one individual team, nobody will buy that individual team because they get it anyway on the package and they could get other things that they want and they don't need to watch it if they don't want it.

If this was handed me by a student in a seminar to get a thesis, I would send him back to the computer. This is -- it can't happen. I mean, it shouldn't happen. There's something wrong with the model.

- Q. Was it an error for Dr. Noll not to consider multiproduct pricing with respect to the MVPD sale of these products?
- A. Again, multiproduct pricing is what happens in the real world, and he's trying to approximate what would happen in a but for in a world with a different assumption. So yes, an error. It's an methodological flaw, and it's one that people don't make anymore.
- Q. Does it affect the reliability of the model?
- A. Well, the price goes up \$16 over 24, so that's 60 percent, so -- and that's the price of the but-for-world league bundle and that's the price of interest, so 60 percent is huge.

THE COURT: Let me ask you one question. You gave an example of the Pontiac and Chevy being sold by GM and those were the multiproducts, and you had to figure that the dollar wasn't necessarily lost because the other was a family car and you might prefer it.

THE WITNESS: Right.

THE COURT: For two standalones, standalone Yankees, standalone Giants, do you see that as similar to the Chevy and the Pontiac?

THE WITNESS: So, the demand system that Dr. Noll is using, implicit in that demand system is what would happen if the price of, say, the Angels went up, how many people would go to another team.

THE COURT: That's what I'm sort of asking you.

THE WITNESS: Do I see it? I'm taking Dr.

Nolls -- this is what the implications of Dr. Noll's estimates are.

THE COURT: Okay.

THE WITNESS: There probably is some substitutability, and I don't know exactly how much. I've not undergone my own demand estimation. But this is what he's using to make predictions with.

THE COURT: But is it possible -- I'm asking you to speculate why he didn't do that multiproduct pricing is it because really the standalone Yankee person wouldn't ever buy a

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standalone Angels. The whole reason you do standalone is you want to watch that team and that's it, that's your favorite team, that's who you want to watch. You'd never go from the Yankees to the Angels if that was your goal.

THE WITNESS: I think there are people who like several teams.

THE COURT: But then they'd go to the package and I can see those are the two -- you said there were two products, but you said his model has 31 products.

THE WITNESS: So they might go to the package and that's in here also, by the way.

THE COURT: I get that.

THE WITNESS: But I'm not going to try and justify his demand model, but I do think there probably are people who would switch, but we may disagree. I don't -- I don't know enough to argue this with you.

THE COURT: Right, nor do I really, but it didn't seem like a Pontiac and a Chevy to me.

THE WITNESS: I used that because everybody knows General Motors.

THE COURT: For sure, but I also saw the similarities there, but I didn't see it with respect to the Yankees and the Angels. But you're saying, look, if he did, you're not going to quarrel with that. He saw 31 products.

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THE WITNESS: Yes.

- Does the multiproduct pricing also impact an RSN sale of an 1
- Internet and TV product in the but-for-world in Dr. Noll's 2
- 3 model?
- 4 Yeah. In Dr. Noll's model, no, the Internet and the TV are Α.
- totally separate in Dr. Noll's model. 5
- Should he have taken that into account in your opinion? 6 0.
- 7 Α. Yes.

- Q. If he had, how would it affect prices?
- 9 Well, the RSN would then price -- it has an incentive to
- 10 price each a little higher because, again, it's not their
- 11 multiproduct pricing on the RSN side. So the cost to the MVPD
- 12 would go up a little bit and the price of the Internet would go
- 13 up a little bit for exactly the same reason that if it didn't
- 14 go up a little bit, if the Internet was too low, it would lose
- 15 money from its MVPD product and vice versa, so that's just
- 16 multiproduct pricing.
- 17 THE COURT: I'm sorry. The MVPD distributes both the
- Internet and the television? 18
- THE WITNESS: Currently I believe --19
- 20 THE COURT: I thought they were out of the Internet.
- 21 THE WITNESS: No. The MVPD is out of the Internet.
- 22 THE COURT: That's what I thought. It's not part of
- 23 their --
- 24 THE WITNESS: We're talking about the RSN now who is
- 25 selling to both of them.

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THE COURT: So it's their multipricing; it's the RSN's?

THE WITNESS: Both of them are multiproduct pricing, the MVPD --

THE COURT: We did that.

THE WITNESS: And then the RSN is doing the Internet and the MVPD.

Q. Let's turn to the next part of your analysis, which is the joint venture incentive for the teams in the leagues and let me put up a slide number four to illustrate your analysis.

What did you do in your joint venture analysis and how does that differ from what Dr. Noll did?

This is related to the multiproduct pricing but it's not Α. the same thing. So the RSN in Dr. Noll's model, he actually earns profits from two products. He earns his own product and the other product, 1/30th of the league bundle, so that's not in Dr. Noll's model.

The RSN only sets prices -- it only sets its own price, but when it sets its own price, it realizes that if somebody -- if it increases its price, somebody leaves, it gets 1/30th of the mark-up on the other one, so I put that back in. So that was the pricing of the RSN.

And then the other side is the pricing of the league So I assume that the league would hire somebody to do bundle. the pricing and that person would be interested in maximizing

the profits of the owners of the assets, which, in this case, 1 2 those are the teams. So I let that person price -- he was just 3 pricing one product against others. And then I just solved for

- the Bertrand equilibrium or the Nash equilibrium for that. 4
- 5 that clear?
- 6 In your analysis, are the teams setting the prices for 7 their RSNs together or separately?
- No. Each team sets one price separately without 8 9 communicating with any other team, and then there's this person
- 10 that the league hires who sets one price without communicating
- 11 with anybody.
- 12 Q. Does slide five reflect the joint venture pricing incentive
- 13 impact on Dr. Noll's analysis?
- 14 A. Yes. Again, I did exactly the same thing as I did before.
- 15 I took exactly Dr. Noll's model, so the RSNs are now pricing
- again, there's no MVPD pricing now, there's no multiproduct 16
- 17 pricing except for to the extent that the RSN is pricing this
- and understanding that it gets profits from the other one, from 18
- the league bundle. So this is all just Dr. Noll's assumptions 19
- 20 And I lifted this one assumption. I said, look, the
- 21 league and going to try and maximize the profits of the league
- 22 and the RSN is going to maximize the profits it gets from the
- 23 standalone and the 1/30th it gets from the other products, left
- 24 everything else alone, and what you get in column B is what you
- 25 get.

- Q. And column B reflects your analysis. What is the impact on the pricing?
 - A. Now the price goes up again. And now the price goes up \$9 about over what Dr. Noll goes -- went up 35, 40 percent, which indicates that incentive the monetary incentives to the people -- that you put into the model.
 - Q. Would a result in interest, in this case the package price goes up 35, 40 percent, what does that tell you about the reliability of the model?
 - A. It says it's sensitive to these monetary incentives, which I believe Dr. Noll didn't specify correctly; and the result of interest changes pretty substantially when you do do that.

THE COURT: Again, I have the same question I had for the last criticism. Did he have a justification and did you -- can you tell why he rejected it or did he not have one?

THE WITNESS: If he had one, I don't recall, and I did

THE COURT: Okay.

read it pretty carefully.

Q. In column B, it shows that the -- on this adjustment, it shows that the package price is about 19 cents lower than the actual world package prices.

Is that a statistically significant result?

A. No, it isn't. It's not statistically different from zero, which means we don't have any confidence that it's one direction or the other, whether it's higher or lower than the

- 1 actual price today.
- So does that show whether or not there's an overcharge 2
- 3 for -- does Dr. Noll's model show whether there's an overcharge
- 4 for baseball package purchasers in the actual world?
- 5 A. So this is another case where if I just make this one
- 6 adjustment, the overcharge essentially goes away. In the other
- 7 case, in the multiproduct pricing, it not only goes away, it
- 8 gets much bigger.
- 9 Q. Did you do the same joint venture pricing and same analysis
- 10 for the NHL Internet package?
- 11 Α. Yes, I did.
- 12 THE COURT: I'm sorry. For the what?
- 13 For the NHL Internet package. MR. PARIS:
- 14 THE COURT: Right. Thank you.
- 15 Α. This is exactly the same analysis so we don't need to go
- over it again and this is the result. And the price this time 16
- 17 goes up by I guess seven over 18 again, about 40 percent.
- Again, there's 55 -- we're now predicting just using this --18
- 19 that it's 55 cents less than the actual price today and, again,
- 20 that wasn't statistically different from zero, so it's very
- 21 similar results.
- 22 Q. In his declaration, Dr. Noll suggested that the profit
- 23 maximizing analysis that you've done here suggested collusion
- 24 by the teams. Is that right in your opinion?
- 25 I really didn't understand that. Each team is pricing to

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- maximize its own product, its own returns, okay? The league is 1 2 hiring somebody to maximize the returns of the owners of the 3 assets. This has nothing to do with collusion. Indeed, we can talk about models of collusion, but they don't look anything 4
- 5 like this, so I just didn't understand that complaint.
- 6 Q. Are aware of any principles of economics that would 7 preclude a joint venture from maximizing its pricing in profits in this situation? 8
 - I'm not a lawyer. There's no principle of economics. I'm not a lawyer; I don't know joint venture lawyers, so I don't want to proclaim on that.
 - Q. Let's turn our attention to the fourth point, which is the equilibrium analysis. First, what is the concept of equilibrium in structural modeling?
 - Equilibrium is used mostly when you're trying to do a counterfactual. So what happens, the concept works something like this. Each agent has things it can do, okay. So in an equilibrium, each agent, among the things it can do, is choosing the thing that maximizes its profits given what everybody else is doing. And the reason we look at that for counterfactual is it's a rest point. Nobody has an incentive to change their behavior. So we don't think it gets there right away, but we think if it's going to stop somewhere, it's going to stop there where nobody has an incentive to change, so that's what an equilibrium is. That's what you asked me.

- Pakes direct
- 1 Is it important for a structural model to do equilibrium 2 for price predictions?
- 3 A. When you're doing counterfactuals, yes. There's no other
- 4 way.
- 5 Q. How did you assess whether Dr. Noll's model is at an 6 equilibrium point?
- 7 I asked the question whether any of the actors had an
- incentive to leave the bundle or to deviate; that one option 8
- 9 that an agent has is to leave the bundle. And so in
- 10 particular, we first chose the Yankees and we asked what would
- 11 happen if the Yankees left the league bundle? So now the
- 12 options to the consumer are the league bundle without the
- 13 Yankees, the Yankees are their favorite team, or some
- 14 combination.
- 15 Q. What did you conclude?
- Not only did the Yankees' profits go up, but so did 16
- 17 everybody else's profits. And why that's important is the
- 18 league might have to vote on this to let the Yankees leave, but
- if everybody's profits go up, there's nobody with an incentive 19
- 20 not to let the Yankees leave.
- 21 I put up slide seven. What does this show? Q.
- 22 A. Am I getting -- is this -- this is the profits before I
- 23 believe --
- 24 0. Yes.
- 25 -- before the Yankees leave the bundle.

- Q. And if Dr. Noll's model was in equilibrium, would you expect any RSN or club to deviate, pull out of the bundle?
- 3 A. No. The definition of equilibrium is nobody has an
- 4 incentive to pull out of the bundle. So that's just the
- 5 definition of the Nash equilibrium.
- Q. And how did you determine if there was an incentive to deviate again?
- 8 A. I asked what would happen to everybody's profits if the
- 9 | Yankees went out? They're still -- they're a but-for-world
- 10 | league bundle, but it didn't have the Yankees in it and
- 11 | everybody Nashed-priced -- Nashed the prices after the Yankees
- 12 | leave, so you have to find out the pricing assumption. So I
- 13 did the same pricing assumption that Dr. Noll did, actually
- 14 | that we're all doing.
- 15 | Q. And what happened to the Yankees profits?
- 16 A. It went up.

- 17 | Q. What happened to everybody else's profits?
 - A. They also all went up. Each one went up.
- 19 Q. And whose data did you use to determine this?
- 20 | A. It's all Dr. -- this is all -- everything is done just as
- 21 | Dr. Noll did it. The only change I made was I let the Yankees
- 22 | leave the bundle.
- 23 | Q. Is this type of deviation analysis unique to the facts of
- 24 | this case?
- 25 A. No. You want to establish that there is an equilibrium, so

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- whenever you do a counterfactual, you ask questions about can people, we call it, deviate. That's the formal word in economics.
- Did you also do an equilibrium analysis from the 0. perspective of the package price?
- Yes, and this is it. Α.
- Q. Okay.
 - Here's what would happen. Do you want me to explain it? Α.
- Yes. Please. Ο.
 - So Dr. Noll's but-for-world league package price was 24.59. That's the left-hand side. And once we take the Yankees out of the league bundle and everybody reprices optimally or in a Nash equilibrium, the but-for league package, which now doesn't include the Yankees, goes up to 26.22. The Yankees by itself, because the demand for the Yankees is so large, goes up to So now, if I want to buy the whole bundle, which would be the 29 teams and the Yankees, I would have to pay 49.40 for it, which is \$15 higher than the current league price. It's fully -- almost 50 percent higher than the current league So there's that -- so there's an incentive to deviate.

If they did deviate, and I'm not saying this is the end, there could be more deviations after this, but if just this deviation occurred and everything else stayed the same, people who will have wanted the whole league would just have to pay close to \$50 for it. Some people wouldn't pay that and

- would go to the standalone things and people would distribute 1 2 like that.
- 3 Q. With respect to Dr. Noll's second model, did you also do
- 4 the equilibrium analysis for individual baseball teams besides
- 5 the Yankees?
- 6 Α. Yes.

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- What did you find?
- For the second model, everybody had an incentive to 8 9 deviate, so that's another reason why I say this is probably
 - Did you also do that for the NHL?

not the end of the movement.

- 12 Same thing happened in the NHL.
- 13 And was the same true for baseball and hockey in Dr. Noll's 0. 14 third model?
- 15 A. No, it wasn't actually. So we just figured this out
- finally just last couple of days. But in -- when you used Dr. 16
- 17 Noll's third model, when the Yankees deviate, we get similar
- results; that is, everybody's profits go up. But when the 18
- 19 other teams deviate, not everybody's profits go up now, so they
- 20 don't have the incentive to deviate.
- 21 MR. DIVER: I'd like to object.
- 22 THE COURT: I understand it, you haven't seen what
- 23 he's talking about that he did in the last couple of days.
- 24 It's not in his report. You have never seen it, correct?
- 25 MR. DIVER: Exactly.

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Pakes - direct F3iqlau3

THE COURT: I have to strike that portion. It's not in the report. He can't testify about it, okay.

THE WITNESS: I apologize.

THE COURT: You didn't know. He knew. The lawyer knew.

MR. PARIS: We were just explaining the withdrawal of the exhibits yesterday.

THE COURT: I have stricken it.

BY MR. PARIS:

O. Does this -- move on.

What is your opinion of the equilibrium of Dr. Noll's third model? Let me rephrase the question. Is Dr. Noll's third model in equilibrium?

- A. No. If the Yankees have an incentive to deviate, all you need is one firm having an incentive to deviate, to do something different than what's presumed for there not to be an equilibrium. Then things start changing.
- Q. And what do the equilibrium analyses tell you about the reliability of Dr. Noll's models?
- So again, as an IO, an industrial organization economist, we generally do counterfactuals as an equilibrium, as a rest point, this is not a rest point, so it's not an equilibrium.
- Q. And Dr. Noll criticizes your equilibrium analysis in your declaration as, quote, economically meaningless because you failed to consider in-market revenues in determining if teams

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and RSNs would deviate.

How does this issue of in-market revenues impact your analysis?

- The answer is I wasn't -- I was just taking Dr. Noll's Α. model and then adjusting it. So he didn't think of in-market revenues. So if my model is wrong because of in-market revenues, his model is wrong because of absence -- and I actually think it is wrong, both of them, for an absence of in-market revenue, but I didn't -- I didn't try to address that.
- Q. Are there economic reasons in the actual world why the Yankees do not deviate and pull out of the package?
- 13 Currently? Α.
 - Why is this? Q.
- In the actual world today? 15 Α.
- In the actual world? 16 0.
 - Yes, because in the actual world today, they won't deviate even though they might earn more profits because this slice of profits, the out-of-market bundle, is only a very small part of media profits, okay? And if they actually did change and deviate, they would change -- there would be no content exclusivity for the national telecasts, which are five times as important as the market -- the bundle, okay? And so they would be putting at risk -- the exclusivity of those contracts would go away, those contracts would have to be renegotiated, and

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that's a lot to risk.

Similarly, the home market --

THE COURT: The in-market?

THE WITNESS: The home territory market.

THE COURT: In-market?

THE WITNESS: In-market. I'm sorry.

THE COURT: Okay.

THE WITNESS: There would be this partial nonexclusivity that was explained yesterday also, and you have territorial now. In that territory, there's going to be 29 baseball teams, so those returns would go away, so they'd be risking --

THE COURT: It would be reduced.

THE WITNESS: It would be reduced. Right. I'm sorry. I didn't mean that.

So they would be risking a lot currently, but in the but-for-world, there's already going to be no exclusivity on the national market at all, and there's going to be only partial -- so they're not risking those contracts. They're already being at risk.

So actually today it makes sense that they don't do this, that the league prohibits this, but what would happen in the but-for-world, so much is changing in that world that I don't want to make -- I've now analyzed it and I really can't tell you what would happen in the but-for-world.

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- Q. Just a couple more questions. Considering the issues we have discussed, does the model reliably show that purchasers of either the baseball or hockey package will pay lower prices in the but-for-world?
 - A. No. Each one of these deviations so these are just simple things that I think anybody who is refereeing an article would do, okay, each time we do this, the price changes dramatically. It's very sensitive to the assumptions.

THE COURT: For any one of these four?

THE WITNESS: For any one of these four. For some of them, it gets much higher; for some, it stays about the same, but they all change rather substantively.

THE COURT: If you had all four areas, it would be even more so.

THE WITNESS: Exactly.

THE COURT: Okay.

THE WITNESS: It's not reliable, his model doesn't generate reliable estimates in the but-for package.

- Q. To wrap up, to the extent that you have anything further, can you tell the Court your overall conclusions about the model?
- THE COURT: I think I got that. It's not reliable.
- 23 THE WITNESS: It's not reliable. Do you want me to do
 24 it in pieces? Do you want --

25 | THE COURT: No, I don't think so. Your overall

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conclusion is it's not reliable.

THE WITNESS: Can I say two things.

THE COURT: Sure.

THE WITNESS: I think again when I started, I said I would send it out to two referees, one who knew the institutions and one who -- so the referee that knew the institutions came back and said, look, this is going to change the returns in all these media markets and he's analyzing only eight percent of it, that would be a reason to reject the article, because it's just not commonsensical to make major changes that only look at a very small impact of it when 92 percent of the market is where -- and if the person who did the structural part came back with these kind of results, I would say there's something fundamentally flawed methodologically. You cannot accept a paper like this. It's just not -- you don't believe the results, so that would be my final conclusion.

THE COURT: We're now going to have lunch from now until about two minutes after 2:00 or so. We'll pick up with cross at that time.

(Luncheon recess)

(Continued on next page)

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F3I7LAU4 Pakes - cross

1 | AFTERNOON SESSION

2:00 p.m.

THE COURT: Please be seated. OK. So, now we have an

- hour allotted to cross.
- 5 ARTHUR PAKES, resumed.
- 6 CROSS EXAMINATION
- 7 BY MR. DIVER:

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- 8 Q. Good afternoon, Dr. Pakes.
- 9 A. Good afternoon.
- 10 Q. You haven't testified in court before, but you have worked
- 11 on other lawsuits before, is that right?
- 12 | A. Three.
- 13 | Q. Three? And you worked through a consulting work when you
- 14 | work on lawsuits?
- 15 A. One was for the Attorney General of the United States
- 16 against the tobacco companies, and the other two were with a
- 17 | consulting company.
- 18 Q. And what consulting firm do you work with?
- 19 A. Different ones. Two are different.
- 20 Q. Which ones are you associated with today?
- 21 A. Cornerstone.
- 22 | Q. Now, you were deposed in this case, correct?
- 23 A. Correct.
- 24 | Q. And you gave truthful answers to your questions?
- 25 A. I believe so.

- You had an opportunity to review the transcript?
- 2 Yes, I did. Α.
- 3 Did you make any changes you thought needed to be made? 0.
- We made some changes, yes. 4 Α.
- Now, you are an expert econometrician, correct? 5 0.
- Some people would think that. 6 Α.
 - And you describe your experience, your expertise, with
- 8 respect to the BLP method, correct?
- 9 Yes, I'm one of the coauthors.
- 10 And that's an analysis of the demand side of structural
- 11 models, or demand functions of structural models?
- 12 It's an analysis of the demand system for differentiated
- 13 product models.
- Now, an application of BLP was used in this case, correct? 14
- Yeah, it had two parts. One part was the viewership model, 15 Α.
- and the second part was more like BLP, it was a demand model. 16
- 17 And you are not here testifying on the demand model; you
- 18 are here to testify on the simulated counterfactual world part
- 19 of the model, correct?
- 20 Yeah, Professor McFadden will do that quite ably, I'm sure. Α.
- 21 Now, you are not an expert in sports economics, correct? Q.
- 22 Α. That's correct.
- 23 And you are not an expert in broadcast economics.
- 24 No, though it's true I have edited a journal which has had
- 25 articles on these topics.

- Pakes cross
- 1 Do you know the mechanisms for revenue sharing in the NHL
- 2 and Major League Baseball?
- 3 A. I know some of them, to the extent I needed to know for
- 4 this.
- 5 And can you describe them.
- The one for the out-of-market packages, 1/30th of the 6
- 7 revenues generated by the out-of-market package goes back to
- the team, to each of the teams. I believe it's similar for the 8
- 9 NHL. And I believe the other thing I checked was for the
- 10 national contracts, I believe it's the same.
- 11 And do you know about sharing of revenues generated by
- 12 local teams selling products?
- 13 No, I do not. Α.
- 14 Do you know why some revenue is shared and other revenue is
- not shared? 15
- 16 No. Α.
- 17 Do you know why some revenue is generated through the
- 18 league centrally and why some is generated through the teams?
- 19 Α. No.
- 20 You do know, do you not, that the NHL and Major League
- 21 Baseball both have national television contracts, correct?
- 22 Α. Correct.
- 23 Do you know which teams participate in those contracts?
- 24 Α. No. I imagine all of them. I'm noted sure.
- 25 Do you know how teams are compensated for those national

television contracts?

- My understanding is that the national revenues are 2
- 3 generated 1/30th also.
- 4 Do you know whether it's profitable for each team to Q.
- 5 participate in those contracts?
- I have not analyzed that. 6
- 7 Q. Do you have an opinion about whether the Yankees would
- continue to participate in some national contracts if 8
- 9 determined it was not profitable for it to do that?
- 10 Do I have an opinion on it?
- 11 Ο. Yes.
- 12 I would have to know more about the Yankees before I had an
- 13 opinion on that.
- 14 Q. Now in the BLP papers you wrote about the automobile
- industry, correct? 15
- 16 Α. Correct.
- 17 And there is a series of articles about the automobile
- 18 industry, correct?
- 19 A. Yes.
- 20 Q. And each one of those you cowrote with an expert in the
- 21 automobile industry, correct?
- 22 A. Well, Jim Levinsohn is more of an expert than me.
- 23 learned a lot.
- 24 Q. And in fact whenever you produce a structure model in a
- 25 particular industry, you work with an expert in that industry,

is that correct?

- I'm trying to think if that's correct. So, Steve Olley was 2
- 3 a student of mine, and we wrote this paper which is equally
- famous called Olley Pakes, and at least when he started I don't 4
- 5 think he had any more knowledge than I did, but by the time we
- 6 finished he probably did.
- 7 Q. But would you say it's virtually the case that every
- structural model you have written you have written with an 8
- 9 expert in the industry?
- 10 A. Close to that at least. Even, by the way, other
- 11 methodological articles I try and write with somebody who is --
- 12 so, I have written on the consumer price index, and I wrote
- 13 with somebody from the BLS.
- 14 Q. But you have not worked with an expert in the industry for
- 15 this report, correct?
- I wasn't asked to build a model; I was asked to consider 16
- the robustness of the findings in a given model. That's a 17
- methodological question. I also had people to ask questions 18
- 19 to.
- 20 Q. So, you aren't here to give an opinion on what the correct
- 21 design for a structural model for this industry is.
- 22 A. No, I was here to assess the robustness of Dr. Noll's
- model. 23
- 24 Q. Now, I want to turn to the Yankees deviation example you
- 25 discussed right before lunch. You testified that this implies

Pakes - cross

- that Dr. Noll has not defined an equilibrium, correct? 1
- In the "but for" world model. 2 Α.
- 3 In the "but for" world model, correct. 0.
- Α. Yes. 4
- 5 Now, you understand that any deviation by the Yankees would
- 6 require a change to league rules, correct?
- 7 Yes. Require, yes, some change.
- If I held the league rule constant, and I ran the model, 8
- 9 that would be an equilibrium, wouldn't it be?
- 10 If you forbid the Yankees from deviating, OK, so then Dr.
- 11 Noll's prices under his assumptions at the RSN prices, and
- 12 under his demand system, and all of that, no double
- 13 marginalization, it's an equilibrium. But that forces firms
- 14 not to deviate when it might not be in their interest to not
- 15 deviate.
- Q. But you testified you don't know whether the Yankees would 16
- 17 have an incentive to withdraw from the national television
- 18 contract, correct?
- 19 So, again, in the "but for" world are you asking me? Α.
- 20 In both. 0.
- 21 So, I did ask the question of the people, my consultants
- 22 and lawyers in this group, of why they wouldn't deviate now,
- 23 and we discussed that, and there was a worry about exclusivity
- 24 of the national contracts would be gone, territorial
- 25 exclusivity of the home market contracts would be gone, and

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Pakes - cross

- there would be partial content exclusivity gone. That's a lot 1 up at risk; that's 92 percent of the media revenues. 2
 - Q. But you're addressing not the Yankees' interests but the league's interests, right?
 - A. You know, the Yankees' share of the national contracts is more than it makes in the out-of-market bundle. We checked that.
 - Q. But you understand that the Yankees contribute more than 1/30th of the value to the national contracts.
 - I don't see why that's relevant. If the national contracts go away, they lose 1/30th of the value of the national contract.
 - Q. I'm not asking if the national contracts go away. I'm asking if the Yankees withdraw from the national contract and have their own national contract.
- I have not analyzed that, so I don't have an opinion on it. 16
 - And you don't think it's obvious that the Yankees would earn more money by having their own national contract?
 - A. Do I think it's --
 - THE COURT: Well, in other words, they would do better than 1/30th.
- 22 THE WITNESS: Yeah, they would probably do better than 23 1/30. But do I know that for a fact? No.
- 24 Q. So, the issue isn't whether the Yankees have an incentive 25 to deviate, correct? The question is whether this is a

- 1 | realistic rule, is it not?
- 2 A. Whether it's a what rule?
- 3 Q. Realistic league rule.
 - A. It is a rule currently.

THE COURT: I think he is just saying if it was only about money, and they could make more than 1/30th by deviating, and there were no rule, they would deviate if it was only about money. That seems to be the question.

THE WITNESS: That might well be true.

THE COURT: OK.

- Q. Now, your model of the Yankees deviation is not an equilibrium, is it?
- 13 A. No.

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- 14 | Q. In fact you have suggested -- I guess until ten o'clock
- 15 | last night -- that all teams would have an incentive to
- 16 deviate.
- 17 A. What I suggested -- and I think I said this in my direct -18 is that --
- MR. PARIS: Objection, your Honor. This is the testimony that Mr. Diver asked.
- 21 THE COURT: No, he's saying prior to any change at 10
 22 o'clock last night what was his view, and I think that's fair
 23 ground.
- OK, go ahead.
- 25 THE WITNESS: Can you just repeat the question just so

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Pakes - cross

I make sure I answer the right thing?

- 3 Major League Baseball would have an incentive to deviate from

Q. You showed, did you not, that many or all of the teams in

- 4 the package.
- 5 A. In Model 2. Can I say one more thing? I said that none of
- this, even after the deviation, it wouldn't be an equilibrium. 6
- 7 Everybody else could move also. I never checked that.
- So you don't know what the ultimate result would be. 8
- 9 No, I don't. I don't think you do either. Or your --
- 10 But it's true, is it not, that if all 30 teams deviated, Ο.
- 11 there would be no teams left in the bundle, correct?
- 12 Α. Yes.
- 13 So there would be no bundle. 0.
- 14 That's correct. Α.
- And if that were the equilibrium, then all of the 15 Q.
- teams would be worse off, would they not? 16
- 17 I believe Dr. Noll made that calculation.
- 18 And you never challenged it, did you? You never challenged
- that calculation? 19
- 20 It doesn't mean anything with respect to an equilibrium.
- 21 All it means is that -- all I need is one deviation, one firm
- 22 that's -- that's an equilibrium. So you have to define another
- 23 notion of equilibrium for that to be a reasonable assumption.
- 24 Q. You agree that in deciding whether to change the rule the
- 25 league could take into account whether the bundle would

- 1 | disappear or not, do you not?
- 2 A. I imagine that's true, yeah.
- 3 \parallel Q. So I want to -- actually, before I get to that -- no.
- 4 MR. LECKMAN: May I approach?
- 5 THE COURT: Sure.
- 6 Q. Can you turn to page 682 of the C&Y slide?
- 7 A. Yes.
- 8 | Q. Do you recognize this chart?
- 9 A. Actually I don't remember it, but I imagine I have seen it
- 10 before.
- 11 Q. OK. Well, I think you were just handed a copy of the C&Y
- 12 paper.
- 13 | A. Yes.
- 14 Q. And this is the diagram of the industry in C&Y. OK?
- 15 | A. OK.
- 16 | Q. Do you see at the top left it discusses content providers
- 17 | including sports leagues.
- 18 | A. Yes.
- 19 Q. And there is an arrow to the programming networks?
- 20 A. Correct.
- 21 | Q. Does C&Y discuss the vertical relationship between sports
- 22 | leagues and broadcasting networks?
- 23 A. Not directly. Do you want to know why?
- 24 | O. Yes.
- 25 A. OK. Because when they do their counterfactual, the amount

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of income that goes to the program networks doesn't change very much, so there was not a real reason to change any of the relationships between the program networks and the content providers.

I mean it was exactly the opposite of what happened when you went the other direction. So, when you went the other direction and you changed everything, OK, so, you know, you needed to change what the networks got. But now after you make that change to what the networks got, they were getting approximately the same as before, so there was no reason to think they could have to change their contracts with the content providers.

- Is that discussed in the paper?
- 14 I have discussed this with him. I know them both. Α. I mean
- 15 I had to advise his thesis; I had to know what was going on.
- Now, you understand, do you not, that if the change was 16
- 17 made to a la carte, there would be renegotiation of contracts
- at all these levels? 18
- 19 A. As I said, they thought -- and I think they were probably
- 20 right -- that they might have changed. I'm not saying they
- 21 wouldn't. I really don't know. But they thought that the
- 22 networks, you know, were getting both the same amount of money,
- 23 and as a result there is no reason to change the contracts
- 24 upstream.

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Now, even leaving that issue aside, is it true that just

real world.

- because these contracts would be renegotiated there would need to be a bargaining analysis done?
- A. So, there are two aspects of this question. If you are really trying to mimmick the real world, so they do bargain, they sign contracts, they negotiate, that's what happens in the

You know, there are times when you can circumvent this kind of analysis by something that sort of bounds it or gives us a reasonable approximation to it. So, there is stuff like that in the literature also.

This is not an easy thing to do, I understand that.

What Crawford and Yurukoglu did is not an easy thing to do.

So, for example, prior to Crawford and Yurukoglu there were papers that tried to do this in different ways. So, I could go further and explain these to you if you want. If you don't want, I'll stop.

- Q. Let me ask you this. If the leagues sell their rights to a programming network through a flat fee, and then they were renegotiated, would there be any purpose in running the bargaining model that they ran?
- A. If the leagues again sell their programming -- the league bundle? What do you mean by the leagues?
- 23 | Q. I am talking about the national contracts here.
- A. So, I'm not an expert on the national contracts, but you mean the contracts that go all over the country. You know,

ESPN's contract, for example?

Sure. Q.

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- 3 OK, so ask again. Α.
- 4 In renegotiating the fee, OK, they currently pay \$100 Q.
- 5 million, and they have to renegotiate that fee to take on a la
- 6 carte.
- 7 A. If they would have went a la carte, I believe that -- and I
- looked to a couple of these contracts, and they all had a 8
- 9 clause in them that if the content exclusivity wasn't abided
- 10 by, that was a major change, and you had to renegotiate.
- Q. And isn't it true that it wouldn't make a difference, Dr. 11
- 12 Pakes, because it wouldn't be a marginal cost for the network?
- 13 A. You know, you keep on saying this, and you say it in the
- 14 report about marginal cost. I never understood this.
- 15 You know, these companies have to cover their fixed
- The big costs are the programming costs, satellites, 16
- 17 the cable network underground. Without a mark-up you can't
- 18 cover that. So, you know, there is an equilibrium in this
- 19 market where people can cover those investments.
- 20 Q. Now, did you tell Dr. Yurukoglu that he should analyze this
- 21 level in the paper?
- 22 Α. Which level?
- 23 The league programming network.
- 24 Dr. Yurukoqlu's thesis was his idea. He is a rather
- 25 amazing guy.

Pakes - cross

- And you testified, did you not, that Dr. Yurukoqlu knows 1
- 2 much more about the sports industry and about the content
- 3 providers in this industry than you do, correct?
- Dr. Yurukoglu has been working on this industry for five or 4
- 5 six years. Yes, I would hope so.
- And you would have relied on him for that analysis. 6 0.
 - I didn't rely on him at all; I didn't talk to him at all. Α.
 - Can you open your deposition, please, page 66. Q.
 - THE COURT: Where is his deposition?
- 10 THE WITNESS: Good question.
- 11 MR. LECKMAN: In the joint binder.
- 12 THE COURT: Tab 4? What page in tab 4? It's the big
- 13 fat book.

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- 14 THE WITNESS: They are both. This one?
- 15 THE COURT: Yes, page 66.
- 16 THE WITNESS: 66?
- 17 Starting at line 3 and finishing at line 14 is what I'm
- 18 focusing on.
- 19 Page 66, OK, I'm on. Α.
- 20 OK. Did you or did you not testify that you would have
- 21 relied on him for that judgment?
- 22 A. When he was writing his thesis? When he was working on
- 23 this? Certainly. I mean he had been working on it for two
- 24 I had not studied it. What's the question?
- 25 Now, you have stated that the C&Y is an "industry standard"

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now or "generally accepted analysis"?

- I think it's at the forefront of analyzing these kinds of 2 Α.
- 3 relationships, vertical relationships.
- 4 Now, are there any other papers not written by Dr. 0.
- 5 Yurukoglu as proffered that use this analysis?
- 6 Yeah, there is one by --Α.
 - In this industry?
- 8 There is one in the hospital industry. The hospital
- 9 industry is an industry that's very similar.
- 10 The hospital industry is very similar to the MVPD? Ο.
- 11 In the following sense. OK? So, you have to let me say
- 12 So, there is a bunch of health care providers just like
- 13 there is a bunch of RSNs. There is an intermediary, which is
- 14 an HMO or an insurance company, which contracts with the
- 15 various healthcare providers and then provides a bundle to the
- consumers, which is an ability to access any of these different 16
- 17 healthcare providers. In that sense it's similar. And that's
- 18 the reason that there are papers using this in that context.
- 19 There is nobody who has written about how widely this
- 20 applies to other broadcasting situations.
- 21 I don't know that there is. By the way, this is a
- 22 reasonably new paper, and there are several people working on
- 23 applications of it.
- 24 Now, you understand that the model that they have produced
- 25 is built on the assumption that the programming providers price

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linearly, correct?

- That's my recollection, yes. Α.
- 3 And you recall that they said that linear input costs above
- 4 production marginal costs -- in this case zero -- are often
- 5 considered unrealistic. Do you recall that?
- 6 So, I don't -- you want to point me to it? Because my
- 7 recollection is --
 - Sure, page 658, footnote 23.
- 9 It's in a footnote, so let me look at why they footnoted it
- 10 and never put it in the text.
- 11 THE COURT: 658 you said in the paper?
- MR. DIVER: 12 Yeah.
- 13 THE COURT: 658, footnote 23.
- 14 THE WITNESS: If I may, I would like to look at the
- 15 text to know why they footnoted it first. I don't remember the
- 16 whole paper.
- 17 So, they're saying -- well, let's see where they are doing
- 18 it. "We assume that the agreements between ... in reality
- payments are linear but contain other provisions as well. 19
- 20 Descriptions of the service to be provided by each side
- 21 standards technical... Few contain monetary transfers,
- 22 however, and if they do, they are negligible with respect to
- 23 the contract's total value. The model of the contract is only
- 24 a linear fee for each distributor and channel." So, they are
- 25 telling you there anything other than a linear fee is small.

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Down below, if you go to the next sentence after the one that you just quoted, it says, "When there is downstream competition, however, commitment to linear contracts is one way of avoiding the dissipation of profits due to such competition."

That's essentially what I was saying when I was explaining this earlier on today.

- Q. But you agree that other economists view this as unrealistic.
- 10 They would view it as unrealistic in a model where there is 11 only -- each agent in this model is only marketing one product.
- 12 That's where the theory comes from. And that's also where the
- 13 theory falls apart.
- 14 Q. Now actually in your report you provided a justification for linear pricing, did you not? 15
- A. I think I just assumed it. But we can look back if you 16 17 like.
- 18 Q. You just assumed it, OK.
- Actually, you know, when you think about what I did, I 19 20 assumed -- except for the one change I made at a time to Dr.
- 21 Noll's model -- so I'm not making assumptions, I'm just taking
- 22 Dr. Noll's assumptions and changing them one at a time.
- 23 Ο. You're assuming linear pricing, are you not?
- 24 Of the consumer? To the consumer? Α.
- 25 No, to the MVPD.

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I don't actually analyze that. There is one part of my report I believe where we looked at RSN pricing, and just to get an approximation to what is going on we added on the mark-up, the MVPD mark-up that the Federal Communication Commission had estimated. So, that's one way around this problem if you don't want to do everything. If someone knows one of the mark-ups, you just add on it. So, there is a part of my report that does that, and in that part of my report I believe they are pricing linearly.

- Q. And your contention that Dr. Noll should have applied the bargaining model for the C&Y would only apply, correct, if there were linear pricing.
- I don't know what -- there is all sorts of negotiated contracts. All I'm saying, I never made any contention of any I'm taking Dr. Noll's contentions and changing them one at a time to find out if it's robust. So, when you say my contention, I never quite understand what you are saying.
- Q. Are you saying that Dr. Noll did or did not need to use the C&Y bargaining analysis in his model?
- So, what I did say is one needs to model the process setting marginal costs correctly -- or a get correct approximation to them -- and Yurukoglu and Crawford show that in this industry, especially in the second paper, show that in this particular industry the bargaining model was very important, in fact switched results for them. So, you know, I

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Pakes - cross

would be worried if we didn't do something that reflected that in a model.

THE COURT: Look, so the short answer to his short question is you are saying that Dr. Noll should have used the C&Y model.

THE WITNESS: He could have done -- that's one way of doing it. If he did something else that approximated it, you know, or sort of got a bound, an upper bound to what could have happened, I would have been happy with that. He did nothing. That's what bothered me.

- Q. You are not saying that he needed to do this bargaining model that is reflected in the C&Y paper.
- I don't think I ever said that either in my report or in your deposition.

THE COURT: Well then, if not, what would have satisfied you?

THE WITNESS: So here is one thing that I thought of trying, and we just didn't have enough time to try it. What we do is the RSN would linear price to the MVPD, and the FCC has a measure of what the mark-ups of the MVPD are. It's about 56 percent I think, something on that order. We looked it up.

If I would have had a little more time, I would have said, OK, the RSN is going to price knowing that the MVPD is going to put on an additional thing and see what would have happened. So, that's the kind of thing I would have tried just

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to get an idea of whether it matters or not.

THE COURT: Now that really wasn't my question. you never said that he had to use the C&Y bargaining model, then what would have satisfied you with respect to that aspect of the pricing?

THE WITNESS: So, this is what I wanted go back to There were papers on vertical markets before C&Y, so, before. for example, there was one by Aviv Nevo, it's in one of our best journals, and what he did, so he was doing what works out to be cereal prices, but he was selling them to supermarkets, and the supermarkets were then selling them to consumers. he found out what were the mark-ups. He didn't know how to do C&Y; nobody knew how to do C&Y. So he found out what the markups were at the supermarket, and he said, OK, my assumption is they price knowing that the supermarkets will add on another five percent.

THE COURT: So, had he done that, that would have been

THE WITNESS: At least it would have been an attempt, I would have had some idea of what's going on, or something like that.

THE COURT: OK.

- Q. Let me ask you, do you know how a la carte channels are currently priced on DirectTV?
- 25 Α. No.

- Pakes cross
- 1 Do you know how pay-per-view channels are currently priced?
- 2 Α. No.
- 3 Now, you said you are not a trained lawyer, correct? 0.
- 4 Correct. Α.
- 5 And you don't have an opinion on what behavior would be an
- 6 antitrust violation or not, correct?
- 7 Every industry I know something about that, but I'm not a
- 8 lawyer.
- 9 Q. Now you agree that Dr. Noll's model shows that all of the
- 10 products would be profitable, correct?
- In the "but for" world? 11
- 12 Q. Yes.
- 13 I think that's right. Α.
- 14 You don't have any dispute with that, do you? Q.
- 15 Α. Except for it's not an equilibrium.
- But you don't have any dispute with his contention that 16
- 17 those prices would be profitable.
- 18 A. So, again, I'm going to assume that his marginal costs -- I
- guess I never checked whether they would covered the fixed 19
- 20 costs of production or not. If you assume his marginal costs,
- 21 they're profitable. He showed that.
- 22 Q. And your changes to the model increased prices by 30 or 40
- 23 percent over his already profitable prices, correct?
- 24 It depended on -- you know, some of them -- yeah, they all
- 25 increased somewhat, and the amount of increase depended on the

change.

- And that's a lot of market power, is it not? 2
- 3 I don't know. Again, you keep on using these words like
- markup and market power. Again firms need to cover their fixed 4
- 5 costs; they don't exist without fixed costs. This is not a
- world where price equals marginal cost makes any sense at all. 6
- 7 Do you have any notion of what the fixed costs are for --
- 8 Α. No, I don't.
- 9 Do you have any reason to believe that the fixed costs are
- 10 a major component?
- 11 Yeah, I think satellites are expensive, I think cable
- 12 networks underground are expensive. Yeah, I think they are
- 13 very expensive.
- 14 Q. Relative to the rights fees that are being paid?
- 15 My guess is satellites, yeah, and cable networks
- underground, yeah, even relative to the rights fees. By the 16
- 17 way, that's pure guessing on my part.
- 18 THE COURT: Right.
- 19 A. But you think about a satellite, and it's expensive. Ι
- 20 don't know what else to say.
- 21 Q. But the satellite is carrying all kinds of programming,
- 22 correct?
- 23 A. Yeah, that's true, but DirectTV has it pay for their
- 24 satellites.
- 25 We are talking about the profitability of programming at

- issue here, correct?
- 2 Α. Excuse me?
- 3 We are talking about the profitability of the sports
- 4 programming here.
- 5 A. DirectTV has to pay for their satellites, you know, and
- 6 from RSN programming as well as other things, and we have
- 7 already heard by Dr. Noll the bigger subscription mover is the
- 8 sports channels.
- 9 Q. And we have also heard that the biggest cost is the rights
- 10 fees, have we not?
- 11 The biggest cost of the RSNs.
- 12 Q. The programmers.
- 13 I thought the rights fees were paid by the RSNs. Α.
- 14 Now, in your modeling when the price increases over Dr. Q.
- Noll's model, the output drops significantly, does it not? 15
- A. Yes, but the output -- I don't think the output ever 16
- 17 dropped below what it is in the current world. In fact I think
- 18 it's substantially higher than that in every case.
- 19 Q. So allowing these additional products would increase
- 20 output, correct?
- 21 A. Yeah, I think that's the case. The funny thing about it
- 22 for me at least as an economist is the increase in output was
- 23 substantial, it was like 90 percent or 9/10ths, and for these
- 24 90 percent there is no data, it's all manufactured data from a
- 25 distribution assumed on the 10 percent, or about 10 percent who

Pakes - cross

- watch out-of-market channel. 90 percent of the people who are 1 buying in Dr. Noll's model you have no real data on. 2
- 3 Q. Now, your claim that joint venture pricing is necessary
- 4 here is not something that's specific to the sports
- 5 broadcasting aspect of this case, correct? It arises simply
- 6 from the fact that the leagues have joint ventures?
- 7 I don't know what you mean by not specific. If you tell me
- what you're referring to, then maybe I can answer better. 8
- 9 Q. You understand that the leagues offer other joint products,
- 10 correct?
- 11 Yes, I understand that.
- 12 You understand that these are sometimes sold in competition
- 13 with the clubs?
- 14 A. I believe you. I would like to know the products you are
- talking about. It would be easier for me to understand what's 15
- 16 going on.
- 17 Q. And you would want to know whether the leagues use your
- pricing strategy now, would you not? 18
- 19 I'm not sure why. I mean we are talking about a very
- 20 particular market. These are not my models, they are Dr.
- 21 Noll's models. In this model in this framework it makes sense
- 22 to do what I did.
- 23 Q. Now, at your deposition you testified in fact that you
- 24 don't know whether they used joint venture pricing strategies
- 25 for the out-of-market packages they sell now, didn't you?

- Pakes cross
- So, we don't know -- neither I, nor Dr. Noll, nor you --1
- know exactly the strategy they use now. In Dr. Noll's paper, 2
- 3 when he uses the prices that are now, he just assumes that
- 4 they're maximizing their profits on this small bundle. And I
- 5 just assumed that they're maximizing profit on the larger
- 6 bundle. There is no knowledge of this.
- 7 Q. So, you're not basing this on any understanding you have
- about the leagues themselves. 8
- 9 I'm basing it on the same understanding that Dr. Noll had.
- 10 Do you believe that you have the same level of
- 11 understanding of the function of sports leagues as Dr. Noll
- 12 does?
- 13 No, I didn't say that. I say I took my assumptions from Α.
- 14 Dr. Noll other than this pertubation to them.
- Now, you read Robert Bowman's declaration, did you not? 15 Q.
- You know, I read a lot of declarations, so I probably did, 16
- 17 but you'd have to direct me to it.
- 18 Do you know who Mr. Bowman is?
- My recollection is he is from baseball, but you should --19
- 20 you know, there was about 25 declarations.
- 21 Would you believe me if I told you that he is the CEO of
- 22 Major League Baseball and Advanced Media, which is the entity
- 23 that sells the MLB.tv package?
- 24 Α. I have no reason not to believe you, so --
- 25 He may have gotten a promotion since then. Do you know

- what NHL Interactive Cyberenterprises is? 1
- NHL what? 2 Α.
- 3 Interactive Cyberenterprises. 0.
- 4 No, I'm sorry, I don't. Α.
- 5 Do you know how the league subsidiaries are structured with
- 6 respect to the league itself?
- 7 No, I don't. Α.

- And you don't know how they price the products they sell. Q.
- 9 Well, I -- yeah, no, I don't. Α.
- 10 You recall though that Mr. Bowman testified that he sets Ο.
- 11 the price for MLB.tv less than net profit maximizing, correct?
- 12 I do recall that. But, you know, I'm just following Dr.
- 13 Noll on that.
- 14 Let me say, by the way, that if I had all my time and
- all the data I needed, I would think of doing it as maximizing 15
- the expected discount of value of future net cash flow to the 16
- league. But that requires -- Dr. Noll probably would do the 17
- 18 same thing though in a different way than I did it. But that
- requires, you know, a much more intensive model. And this is 19
- 20 an approximation we use often in economics. Dr. Noll used it
- 21 in a more limited way than I did, but he used it.
- 22 Do you know what the NHL's national branding strategy is?
- 23 Α. No.
- 24 Do you know of any reasons why the NHL would prefer to sell
- 25 products through the league than through individual clubs?

- Pakes cross
- What kind of products? 1 Α.
- If the answer is no, then say you don't know. 2 Q.
- 3 Well, if you don't tell me what products, I certainly don't
- 4 know.
- 5 Q. Now, let me ask you, do you have any reason to believe that
- 6 the price that would be set by the leagues for the
- 7 out-of-market packages would not apply to everybody?
- You mean to all consumers? 8
- 9 That's right. Q.
- 10 I have no reason to believe that.
- 11 Do you believe it would be rational for an RSN to agree to
- 12 allow a club to stream its games over the Internet in its local
- 13 territories?
- 14 It could be, definitely.
- Do you believe it would be rational for an RSN to allow the 15 Q.
- 16 league to stream the games over the Internet in its local
- 17 territory?
- 18 A. Again, it could be. It depends on all the relationships.
- So, you know, I hesitate to say what would be rational and what 19
- 20 wouldn't unless I sort of wrote down a model and thought it
- 21 through.
- 22 Do you know why the Internet streams of NHL and MLB games
- 23 are not currently available in local markets?
- 24 Α. No, I don't.
- 25 Now, in your DirectTV pricing model is there any

Pakes - cross

- competitive product being offered that's represented in the 1
- market that's constraining DirectTV's pricing? 2
- 3 No. Α.
- 4 So, DirectTV is being modeled as though --Q.
- 5 Just one second. This is not my model; this is Dr. Noll's
- 6 model. You keep on saying my model. It's bothersome to me.
- 7 It's Dr. Noll's model, and I modified assumptions. But he
- assumed that there was no direct competition. 8
- 9 Q. Your modification is no different than if Major League
- 10 Baseball simply decided to price all 31 products as monopolist
- 11 with no competition in the market, is that right?
- 12 This is Dr. Noll's model, yeah.
- 13 Your variant of it. 0.
- 14 Α. Yes.
- But you do --15 Q.
- 16 By the way, that's not what -- OK, go ahead.
- 17 Do you know if DirectTV is permitted to set the price of 0.
- 18 the out-of-market packages without prior consultation with the
- 19 leagues?
- 20 There is something in the contract that talks about a fair
- 21 price. I can't remember the exact phrase, but there is a
- 22 phrase in the contract.
- 23 Q. And do you know whether there are discussions with the
- 24 league over price?
- 25 I have asked that question, and the answer is, yes, there

Pakes - cross

- 1 are discussions. It's only a limit price in the sense that it 2 shouldn't be lower than that, is my understanding.
- 3 Do you know that? 0.
- That's what I was told. 4 Α.
- 5 But you don't know that independently.
- Well, the structure -- either the NHL or Major League 6
- 7 Baseball, the structure of it was that if you price below that
- you still have to pay the league that price, so that's an 8
- 9 incentive to pay at least that price and more -- or more.
- 10 I can't remember if that's Major League Baseball or National
- 11 Hockey League.
- 12 Now, you agree, do you not, that DirectTV faces competitive
- 13 pressure from other distributors.
- 14 You mean from Comcast or --Α.
- 15 Q. Yeah.
- 16 Yeah, certainly. Α.
- 17 So, if it set the prices in your model --Ο.
- 18 It's not my model. Α.
- 19 -- in your modification -- in your modification --Q.
- 20 There would definitely be a difference. Α.
- 21 -- they wouldn't really be able to do that, correct? Q.
- 22 Definitely it would be more complicated than that. But Dr.
- 23 Noll didn't do that.
- 24 And you also agree that DirectTV faces pressure from
- 25 Internet products.

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- Yeah. Dr. Noll didn't do that. That one I really didn't understand why he didn't do it.
- Q. We will let him explain it.

In fact if teams' games were on the Internet, people could keep their cable subscription and simply switch to the team's package, correct?

- A. So, my understanding -- I have limited understanding. don't you say it again. I know a little bit; I don't know a lot.
- If you don't have anything to say, that's fine.
- 11 I never said I didn't have anything to say. I just said I 12 didn't understand the question.
 - Q. No, I'm just suggesting that DirectTV customers wouldn't have to switch to Comcast to be able to get these products, right? They could buy them on the Internet, correct?
 - If they were Comcast subscribers already, I believe that's correct.
 - Q. And if they -- well, we will leave that.

19 Now, again, your joint venture pricing modification in 20 which you show the leagues setting of prices -- incidentally, in order for the league to set the price to maximize the 21 22 profits of all the teams, it would have to know what the profit 23 of the teams were, correct?

No, it would have to know -- so this is the equilibrium assumption again. It's a rest point. So, let me do it again.

- 1 OK? It's a rest point. So, they are playing this repeatedly,
- 2 and all I have it know is the prices that everybody else is
- 3 charging, which if this is played repeatedly, I can observe
- 4 | from last period. That's the whole idea of a rest point.
- 5 Q. You have to understand what their profits are, correct?
- A. No, I have to understand what my profits are as a function
- 7 of my price and their prices, that's all.
- 8 Q. I thought you said that the leagues were maximizing the
- 9 | total of their profits and the teams' profits?
- 10 | A. Oh, the league. I'm sorry, I thought were you referring to
- 11 | the team. No, the league would have to know the profits of the
- 12 | various agents. But to do that -- can I just say -- all they
- 13 | need to know is what Dr. Noll has estimated and the marginal
- 14 costs. So that demand system -- marginal cost and picking up
- 15 | prices from what happened before -- will give you all of that
- 16 | information.
- 17 | Q. Now, going back to your joint venture pricing modification,
- 18 you stated that the prices really wouldn't be any different
- 19 under that modification, correct?
- 20 A. Different from what?
- 21 Q. From the current prices.
- 22 | A. The "but for" world league price would be very close. If I
- 23 | did that modification, accepted the rest of Dr. Noll's
- 24 | assumption, the "but for" world league price would be almost
- 25 | the same as the current price. It wasn't quite the same, I

think. 1

- So, under that modification nobody would be harmed. 2
- 3 consumer would be harmed, correct?
- If that was the only modification, that may well be true. 4 Α.
 - Because they would have additional choices, correct?
- 6 Α. Yes.
- 7 And they would pay the same price for the same product,
- 8 correct?
- 9 I think that's correct under that modification alone, but
- 10

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- 11 0. There would be no losers from that particular modification.
 - Α. That particular modification, that's correct.
- 13 OK, that's all I have. MR. DIVER:
- 14 MR. PARIS: I have no questions, your Honor.
- THE COURT: Then you're all set. Thank you. 15
- 16 THE WITNESS: Thank you. Thank you.
- 17 (Witness excused)
- 18 THE COURT: All right. So we are ready to turn to Dr.
- McFadden. 19
- 20 (Witness sworn)
- 21 THE COURT: Please be seated. When you are seated,
- 22 please state your full name, first and last, spelling both
- 23 names for the record.
- 24 THE WITNESS: My name is Daniel McFadden.
- 25 THE COURT: And remind me which lawyer you are.

Pakes - cross

- 1 MR. ECKLES: Paul Eckles, your Honor, counsel for the 2 National Hockey League.
- 3 THE COURT: You weren't even on the seating chart 4 yesterday. All right, Mr. Eckles.
- 5 DANIEL MCFADDEN,
- 6 called as a witness by the Defendants,
- 7 having been duly sworn, testified as follows:
- DIRECT EXAMINATION 8
- 9 BY MR. ECKLES:
- 10 O. Good afternoon, Dr. McFadden. There are some slides to 11 help with your testimony today.
- 12 Α. I have.
- 13 And could you please summarize for the court your Ο. 14 educational history.
- 15 I have a Bachelors of Science in physics and a Ph.D.
- in behavioral science with specialization in economics, both 16
- 17 degrees from the University of Minnesota.
- 18 And how are you currently employed?
- I'm currently a presidential professor of public policy and 19
- 20 economics at the University of Southern California. I'm also a
- 21 principal in the Brattle Group, a management consulting and a
- 22 litigation support firm.
- 23 Q. Now, I understand that you won the Nobel Prize for
- 24 economics in 2000. What in laymen's terms, if possible, did
- 25 you win that prize for?

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- Yes, I won it for developing methods to study discrete choice, such as when people have to make choices between the mode they use to commute, or what brand of automobile they buy, or other situations where they have to choose one product or another.
 - Could you briefly explain for the court how your developments in discrete choice modeling have been used in the real world.
- A. Yes, they are used widely in public policy and market research. And I will mention market research because it's perhaps closest to this case. There firms often want to know what will happen if they introduce a new product or change the features of existing products, how that will influence demand, and they use these discrete choice methods to do that analysis.
 - 0. Have you remained active in this area since you won the Nobel Prize back in 2000?
- Yes, very active. Α.
- Q. And how does discrete choice modeling relate to the work that Dr. Noll has done in this case?
 - A. Dr. Noll has a discrete choice problem in the sense that he is trying to explain people's choices between a league bundle and a la carte team packages, and that's a discrete choice for consumers, and he is using discrete choice models and analysis at the core of his demand analysis.
 - I would like to start with an overview of your opinions in

McFadden - direct

- 1 this case. Did you prepare a slide summarizing your opinions 2 in the case?
- 3 I did. Α.

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- 4 Dr. McFadden, can you briefly just summarize your opinions Q. 5 for the court.
 - In summary there are four major opinions. One is that I find his modeling of demand elasticities to be scientifically unreliable.

Secondly, my opinion is that he fails to follow a standard scientific procedure in testing and validating his models.

Thirdly, with respect to his second model, in my opinion it fails a basic falsifiability test for scientific reliability.

Finally, in his third model he fails to replicate key and critical features of the observed consumer behavior.

- Q. Before we get to your critiques about Dr. Noll's model, I would like to cover for the court some basic principles regarding structural modeling on the demand side. Did you prepare a slide describing the essential principles of structural modeling from the advanced side?
- 22 Α. I did.
- And can you just briefly explain to the court each of the 23 24 points you have on this slide?
 - There are three. These are general principles. The first

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is that if you're modeling demand, you should be using data on consumer behavior rather than say, for example, mathematical assumptions.

Secondly, the prediction of the model must be falsifiable. That is, there are situations in which the model should not give certain kinds of results, and you should be able to see that in the model.

And, finally, the model should be consistent with observed consumer behavior particularly on dimensions that are important for the application.

- Q. And are these principles an integral part of methodology when it comes to structural modeling?
- I would say they are integral, and they are the minimum Α. conditions that you need to meet to have a scientifically reliable demand analysis.
- Q. Now, applying these principles to Dr. Noll's model, the first thing I'd like to ask you about is how Dr. Noll modeled demand elasticities. Have you prepared a slide on that issue?
- 19 A. Yes, I have.
 - Q. Now, we are going to cover the first point a little bit later dealing with consumer data, so I'd like to talk about the second two points.

With respect to Dr. Noll's use of market shares, are market shares traditionally used in calculating elasticities?

They don't have to be. They're often used to check or

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validate estimates of demand elasticities.

The methodological complaint that I have here about Dr. Noll's work is that he has not, I think, followed scientific due diligence in collecting data and assuring that it's the appropriate data in his market share calculations. Q. He testified yesterday on that issue that he used the average number of viewers of the championship series of each of

the sports, baseball and hockey. Is that a reliable way to calculate market share for the analysis being done in this case?

In my opinion it would be appropriate, scientifically appropriate, to dig deeper for two pretty obvious reasons: One is that the people who are watching these championship games include people who live in the home territories of the teams playing. And Dr. Noll is assuming that all those people would be potential customers for out-of-market packages as well. If that's true, he has not established it. Secondly, it's not clear that people who are interested in championship games are sufficiently interested to be potential fans during the league season as well.

So, I think that in terms of scientific methodology what he has done is failed to go to any best source of evidence on this, which would be some kind of data from the general population on what they're fans of and what they watch and what their interests are.

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- On your third slide there was some testimony about the Lerner Index yesterday. Can you just again very briefly explain what the Lerner Index is.
- A. Yes, the Lerner Index is a logical relationship between the demand elasticity, the incremental cost of production and the price that would be set by a profit-maximizing firm that's producing a single good.
- Q. Now, given Dr. Noll's testimony that we heard yesterday regarding the league's long-term collective interest in pricing for multiple products, is the Lerner Index something that he should have used in this case?
- I think by his -- certainly by his declarations, and in combination with his testimony, he has essentially indicated that long-run considerations are something that are important for the league. And as soon as you admit the possibility that the league would care about the fan base and what they do this year would affect the market next year, you are no longer in a simple world where the logical relationship of the Lerner Index would hold, so applying it in that situation would be inappropriate, incorrect.
- Q. And how does Dr. Noll's use of market shares and the Lerner Index rather than consumer data, as was done in C&Y, impact the reliability of his model on the demand side?
- I would say that his analysis of price sensitivity is only as good as the quality of these assumptions on what the price

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relationships are in the as-is world in terms of the league bundle and in terms of what the total size of the market is. So, it's only as good as those weakest links.

It's quite a contrast with the C&Y case where there is good data in their analysis of people making choices under different pricing situations, and you can get -- they do get quite an accurate estimate of the price sensitivity.

- I'd now like to take a look at Dr. Noll's overall approach to modeling demand. Did you prepare a slide on this issue? Α. I did.
- And I know there is a lot going on in this slide, so I would like to try to break it into some understandable pieces.

You start by just -- you mentioned simulated fans and avatars. Can you just describe to the court what is meant by that.

First of all, Dr. Noll starts with real demand data on people who are league bundle subscribers. By his own calculations there is a very large set of nonsubscribers out there, and he has no data on the rest of these people.

In building his model what he is doing is creating a simulated population -- here I've called them avatars, because the idea is that they are supposed to be very much like the real people in the real data -- and he is essentially assigning a mathematical DNA to these avatars which is going to have the following properties: First of all, on certain features he is

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going to do this in a way so that it matches the real people, and in other areas he is going to use mathematical assumptions to essentially fill out the DNA which will determine how these people make choices and how they behave.

It's very important I think just in terms of understanding the general structure of what he does to understand that his demand analysis and its features in the end is based on this simulated population, and there is really nothing you can say about what is going on there that doesn't come into it either by mathematical assumption or by the selected features on which he is matching.

I would like to follow up with a few different points that you raised there.

First, on the slide you've got the four percent and the 96 percent, and I think this relates to Dr. Noll's testimony yesterday that he is extrapolating from what he knows about the current league subscribers to try and predict behavior from nonsubscribers, all those other viewers of the league championship series. Is there any problem with the type of extrapolating that he is doing here?

Yes, I think this is quite an extreme extrapolation, and if the probability model, the mathematical model he is using to make this extreme extrapolation, is not exactly right, then any problems with it are going to tend to be amplified, and the extrapolation itself will be unreliable.

(Continued on next page)

Q. To be clear, does Noll have any data for the 96 percent of the nonsubscribers for whom he's trying to predict their behavior?

- A. That's right; he has no data. The situation here, if I can use an analogy, would be if you wanted to get the distribution of heights of people in the general population, you could start with a special group, say, the professional players in the NBA. And what you're now doing is making a statistical probability model of the distribution in NBA heights and using that to extrapolate to the heights of people in the rest of the population. That's not necessarily wrong, but it's quite scientifically I think quite risky that you may not have the sort of the biology of heights exactly right. It's a situation in which there would be a tremendous scientific advantage to having some more data and being able to validate that extrapolation.
- Q. I think Dr. Noll admitted yesterday that he wished he had more data like C&Y did. When an economist is missing data on potentially important features like Dr. Noll concedes is the case here, what, say, what's an economist supposed to do?

 A. The standard procedure would be to try to get data on -- from the entire population, certainly first to go look and see if someone else has already collected it. But if you can't find that, it would -- common procedure would be to collect your own data, do your own survey, find out who is, for

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example, in this case who's a fan and who is not, and perhaps also find out more about what their tastes are, whether they would consider buying or not at various suggested prices.

By the way, that last technique is the technique which is almost a standard in market research where this problem of estimating demand for new product is something that firms have to deal with all the time, and there is now a long tradition and a long history of using survey techniques to understand what's going on and make predictions.

- O. You also indicate on this slide that he did match on selected features. Did Dr. Noll match on all the features that he should have?
- A. No, he did not in my opinion. He has omitted matching on some very important features that are particularly important, actually critical, for trying to estimate the shares of people that will be diverted from the league bundle to à la carte packages at various price differentials.
- Q. Are all of the features that he did include on those avatars that he created, do those all flow from the actual data in the case?
- 21 On the items in which he does match, those do flow from the 22 actual data; yes.
- 23 Does he create any additional features that don't flow from 24 the actual data?
 - Well, he's creating properties of these avatars.

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described it before as saying he's filling out the DNA, the 1 2 mathematical DNA of these avatars with mathematical 3 assumptions. And those are coming by assumption, not from

anything in the real data that he has.

- Q. Just to finish on this slide, in this context, when you're extrapolating to the degree that Dr. Noll admits that he is and that you're missing data on important issues like Dr. Noll admits that he is, is it important to then test your model or validate it in some way for reliability?
- I would say for reliability, validation is very important. Getting any kind of data which tells you what -- you're either correct or incorrect is very important; yes.
- And did you test Dr. Noll's second model for reliability?
- 14 I did. Α.
- 15 Q. And did you prepare a slide on one of those tests?
- 16 Α. Yes.
- 17 Before we get into the details of the slide, can you just explain for the Court what is a falsifiability test?
 - Yes. Let me do it by using a simple example. Suppose that a scale is to produce the -- is purported to be able to measure weights and you have a box that you're interested in and it weighs five pounds on this scale, the question is, is the scale working?
 - If I now take a ten-pound or a heavier box something in the order of ten pounds and put it on the scale and it still

reads five or nearly five, then that is a -- you'd say that model -- that scale fails a falsifiability test.

If you put on an empty box and instead of reading zero it reads nearly five, that scale is giving you a false positive, and you'd say it's failing a falsifiability test.

So that's what a falsifiability test is in situations where you give this thing data which should have known properties, the model -- the scale is failing to give you the results that it should.

- Q. Could you describe the test that's reflected in slide number six here?
- A. Yes. What I did was something like subjecting the scale in my little analogy to heavy weight or a light weight. What I did was take the actual data and modify it in two ways which should have moved the results of this model substantially. One extreme was that all the people currently buying the league package really were fans of only one team, a very extreme assumption. The other was that they are fans of a variety, fans of the game and have essentially equal preferences for each for increment of hours spent watching any single team. At least if they started watching each team five hours and the next hour would give them the same weight, whether it was one team or another.

In these circumstances, I would expect when everyone is a fan of only one team, Dr. Noll's model should find that

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those people are all switching to an ad hoc package for that And the demand for the bundle would essentially drop out team. unless the price fell substantially down to the level of that ad hoc bundle.

In fact, Dr. Noll's models prices for the league bundle don't hardly change at all. It's like the scale effectively not moving its value when you go from the box that -- the real data -- of real data to these counterfactual data where you would expect it to move. The same thing on the last row where you have introduced this case where people have a great taste for diversity, and you would expect them to be quite resistant to leaving the league bundle.

- Q. Just so everyone is clear on exactly how you performed this test, in the second to -- in the second and third rows, rather than using the actual data in the case that Dr. Noll used in his model, you created a completely different fictitious set of data representing two different extremes of fan behavior to see how you would get different results?
- I did. I essentially created two counterfactual alternatives at -- quite extreme. It's like taking your scale, taking something that -- you have your box, your real data, and you're now putting -- testing it against two other boxes which are at two extremes and seeing whether the scale responds to weights -- to things of clearly of different weights, exactly the idea.

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- What does the result of this test tell you about the scientific reliability of Dr. Noll's model?
- A. I think it shows that the second model was not scientifically reliable. It was not responding the way it should if it were to be a reliable model, its purpose.
- In fact, after you prepared this test, Dr. Noll then created a third model on the demand side; is that right?
- He did. Α.
- Understanding in that third model he added four additional equations on the demand side so you would then have 66 equations rather than 62 equations?
- He did. They're called moments.

13 THE COURT: Called what?

THE WITNESS: Called moments.

THE COURT: Moments?

THE WITNESS: In his analogy, that's his terminology, four additional equations or moments; yes.

Q. Dr. Noll testified yesterday about that, and he had some slides he put up indicating that he tested his model against the actual data relating to those 66 features or moments.

Do you recall that testimony?

- Α. I do recall that.
- O. And he found that it did match well on those 66 moments. 23
- 24 Does that change your opinion in this case at all about the
- 25 validity of his model?

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- It certainly would have been alarming had those not matched because that was essentially what the analysis set out to do, but I think that was not enough. There are dimensions which are critical to the question of how sensitive people are to price and to the content and how easily they would move from the league bundle to à la carte packages; and those are the dimensions -- some of those dimensions are ones in which he has failed to -- failed to match the real data.
- Q. And did you then conduct tests on his third model to see whether it's capable of matching on those other important features that you're talking about such as diversity?
- 12 I tested it on one which is essentially people's 13 tastes for diversity.
 - Q. And you prepared a slide -- there are some slides on this issue?
 - Α. I did.
 - Could you just describe for the Court what was the experiment you conducted that's reflected in slide number seven.
 - In this case, you could say this is a simple fitting or calibration test. What I'm doing is looking at the share of the people in the actual league subscriber data who only ever watch a single RSN or two or more than two. And I'm comparing those percentages with what Dr. Noll's avatars do. And what I find, for example, and this is the case of DirecTV, that 6.8

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percent of people actually watch a single RSN; in Dr. Noll's avatar population, 40.5 percent watch a single RSN. So, his model is getting a much larger share of the people that are -focus their attention on a single RSN than is true in reality. And vice versa on the "two or more," 87 percent of people in the actual data watch more than two; whereas in his avatars, only 38 percent do.

MR. DUBNER: We have an objection to this. This was never disclosed. Dr. McFadden did produce analogous data for NHL, but this is the first time we have ever seen this information.

MR. ECKLES: This is the essence of his opinion of his reply model. We have a slide on the NHL that we'd be happy to do the testimony off of.

THE COURT: You would substitute it. It's going to make the same point. So I'll strike the testimony on the baseball and just use the NHL, but it makes the same point, right?

MR. ECKLES: That's correct; it's the same point.

- To be clear, you have done this test on all three data sets and you reached the same result?
- Α. Yes, I have.
 - And just so it's clear again, what does this test show us about the ability of Noll's model to replicate the actual world?

Again, what you're comparing is the share in the actual 1 data who watch a single RSN versus what Dr. Noll's avatar 2 3 population share is. If Dr. Noll's model were working 4 reliability, these should be reasonably close. In fact, they 5 differ substantially. For example, for a single RSN in the 6 actual data, 22 percent watch a single RSN; whereas in Dr. 7 Noll's avatar, more than 50 percent watch a single RSN. Again, his population are far more focused on watching one, single RSN 8 9 than is true in the actual population; and vice versa for 10 people who seem to like diversity because they watch more than 11 two RSNs, 66 percent versus 30 percent.

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- Q. In terms of Dr. Noll's ultimate conclusions in this case, what's the significance of the fact that he's significantly understating the number of fans who watch more than two RSNs?

 A. I think this makes the model scientifically unreliable for its intended purpose, which is to determine how these people who hold the league bundle now will stick to it or move to an à la carte package.
- Q. And again, what do these results tell us about the overall reliability of Dr. Noll's model?
- A. In my opinion, they show that it's not scientifically reliable.
- Q. Did you also conduct a test to see whether Dr. Noll's third model is capable of replicating the percentage of viewers that watch particular RSNs?

A. I did.

- Q. Did you prepare some slides on this issue as well?
- 3 A. Yes, I did.
 - Q. Okay. Can you describe for the Court what this test represents.

MR. DUBNER: Again, we have to object. This was never disclosed to us. I don't think even the underlying information was disclosed to us, certainly not as to DirecTV.

MR. ECKLES: This is just a demonstrative of data opinions that were in his reply declaration.

THE COURT: That's the issue. Show him where in the reply declaration this material is found. Take a minute and show him. If it's really there, show it to him. If it's not, let's move on. You got it? We're going to take a minute to find it in the reply declaration.

MR. ECKLES: For now, let me just continue because we have this slide for NHL, which is clearly something that he did testify about.

THE COURT: All right.

- Q. Can you walk us through slide number 12 relating to NHL data.
- A. Yes. What this shows team by team is what proportion of the people who buy the league package watch each team, that's in red, compared with what Dr. Noll's model predicts, that's in blue. And the pattern is that for in almost every team, Dr.

- Noll does not predict as high a share as occurs in actuality. 1
- 2 In fact, people in actuality watch teams -- watch a lot more
- 3 teams and a lot higher share of them watch every team, any team
- 4 than Dr. Noll's model predicts.
 - O. Is this --

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- THE COURT: Why are there no actual figures for two of the teams? Do you know?
 - THE WITNESS: There are two teams in this case where the prediction is quite close.
 - THE COURT: No. I didn't ask that. I said why are there two teams where there's no actual figure?
- THE WITNESS: Oh, it's just over -- the blue overwrites the red.
- 14 In other words, they merged? THE COURT: I see.
- 15 THE WITNESS: Yes.
- 16 Is this test similar to a test that C&Y performed in 17 connection with their model?
- 18 A. Well, in the C&Y model, they actually imposed as part of
- their moments the condition that these actual and predicted 19
- 20 shares had to match. That was one of the conditions on which
- 21 they matched. Dr. Noll did not use those moments in his
- 22 analysis. So in C&Y, these things line up exactly by the
- 23 construction of the moment fitting, or almost exactly.
- 24 This is a significant deviation from how C&Y performed --
- 25 devised their demand model?

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- I would say it's a significant deviation on a dimension which is, I think, very important to this application, which is to determine what the taste for diversity are in the population of subscribers.
 - Q. Again, what is the significance of this in terms of the reliability of Dr. Noll's model for the purposes he's offering it?
- 8 In my opinion, this makes the model scientifically 9 unreliable.
 - Dr. Noll, there's one last thing I'd like to cover. You were here yesterday for Dr. Noll's testimony.
- 12 Α. I was.
 - Dr. Noll testified yesterday about why the results of his Ο. third model would create some seemingly counterintuitive results in that it's predicting that 99 percent of multiteam fans would prefer the single-team package rather than the league bundle?
 - Α. Yes.
- Does the explanation he offered yesterday relate to any of 19 20 the opinions that you're offering in this case?
- 21 Yes. His explanations yesterday essentially go to the 22 heart of how he specifies his model and the assumptions that 23 he's making.
 - If I could go to the slide from yesterday, that's just what he was shown and he was responding to. His response to

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the numbers 32 percent, 19 percent and 1 percent where the more teams you were fans of, the lower likelihood you bought the league package versus a standalone à la carte package. slide I think was produced because the defendants thought it was implausible. Dr. Noll said he thought it was plausible.

MR. DUBNER: I'm sorry to object again, but this is Dr. Ordover's supplemental declaration and Dr. Ordover was on the stand testifying to this.

THE COURT: No, I understand, but Dr. Noll I think was shown this and did give testimony with regard to this slide.

MR. DUBNER: Oh, absolutely, but then Dr. Ordover had the chance to respond to it and did, in fact, respond to it. This is just entirely duplicative of his testimony.

THE COURT: I don't think that's right. I'll allow this witness to testify because he is talking about how this relates to his criticism of the demand side of Dr. Noll's opinion, so I'm going to allow it.

Go ahead.

I would like to explain in terms of Dr. Noll's assumptions that have gone into his model construction what's causing this and show -- show you that this is an artifact of his mathematical assumptions. It's not anything about real behavior. To the extent it's something about real behavior, that's actually false; it's illogical. And in fact, what's going on here is something that is a characteristic of a logit

model. And in this case, I think it's a consequence of using the logit model in a situation where it is quite inappropriate to use it.

And let me say, first of all, what this property of the logit is that he's using. There's a problem of that model called the red bus/blue bus problem that has the following nature: If you use this model to predict whether a person is going to drive or take a bus, it will often do a very good job of that. But if you now add on another bus, which happens to be almost the same, maybe just a different color, this model will tend to overpredict how many people will take the bus. And if you put in five buses of different colors, it will grossly overpredict how many people will take the bus. That is a problem with the logit model.

And ever since its invention back in the early 70's, it's -- all these people are always warned if they're applying this model, you have to test for that; you have to make sure that this is not a problem in your application, and if it is, you don't use this model in its original form. You have to do something different.

What this property does, it's like having a coin and if you're choosing between the league bundle and single channel RSNs, it's like flipping a coin 30 times. So even if you have a very high probability in one coin toss — it's not a 50/50 coin — a very high probability in one coin toss of taking the

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league bundle if it comes up heads, you'd still have a very good chance of getting 30 heads in a row. See, as soon as you fail to get a head, this model is saying you're going to switch to a single sub -- a single team subscription. And the problem -- and what will happen is the more you -- the more of these flips you have, the more the probability of staying with the league bundle goes down.

And these probabilities that Dr. Noll was responding to, that pattern is due simply and mechanically to this business of multiple flipping of coins and how many are being It's a limitation of the model which people are warned against and Dr. Noll has, well -- well, has not tested for it because there are tests for it, but he's I think not recognized the source of this pattern or that it is essentially a consequence of something that he is wired into.

THE COURT: He's what?

THE WITNESS: It's a consequence of something he wired in mathematically to his avatars; not anything that comes at all from any real demand data.

Q. Dr. Noll testified yesterday he had a couple potential explanations, one of which was that maybe the multiteam fans are more price-sensitive; that's why they prefer the single team package.

Could that be a valid explanation for what's going on here?

A. That absolutely cannot be an explanation, and one thing that's important to understand, the properties of these people are making choices. These people are not real people. These people are a simulated avatars. The properties they have are determined solely by matching on 60 or 66 things plus mathematical assumptions. All this behavior is coming not from anything in the real data but only from a mathematical assumption.

So all -- this whole pattern is forced by a mathematical assumption and the idea that price intensity would be different here, it's logically impossible within Dr. Noll's model construction. It cannot possibly be the explanation.

- Q. I think you covered this, but just to be clear, in this pattern that we see here with the number of fans preferring the league package going down on the right column, could that be driven by any real data in the case?
- A. There's no data that's been introduced by Dr. Noll that has anything to do with this pattern. This is entirely due to an assumption that he has added on his own without any reference back to the real world.
- Q. And what does this red bus/blue bus problem that you testified about here, what does this mean with respect to the methodological soundness of Dr. Noll's model?
- A. I think this is a, from a scientific point of view, a very badly specified model. It's one which I think flagrantly

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- violates common sense. And in my opinion, it pushes this whole model over the line from something that is perhaps fixable to what's really junk science.
- I think you already covered probably everything that's on this slide, but, again, this is something that he could have tested for and should have been able to figure out was an issue?
- A. Well, I'm not going to say that he could have tested for it, but I would say that it is certainly unreliable to use an assumption like this under these fairly extreme conditions without data on actual choice behavior. So he's making a mathematical inference on how choice behavior is going to look without going into any real data on it and that is itself simply unreliable.

It's a situation where I would say a prudent scientist should say if I can't get -- if you can't find me any better data than that, I shouldn't be trying to make this prediction, certainly should not represent it as something which is accurate for the real world.

- Just to sort of conclude now, given all the opinions that you offered in this case, in your expert opinion, is Dr. Noll's model reliable economic science?
- Α. In my opinion it is not.

THE COURT: You're right on time to the minute. you, Mr. Eckles. Here is my thought. We should, according to

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your schedule, be able to complete Dr. McFadden today. We have a one-hour window for cross, which would take us from 3:30 to 4:30, and 15 minutes for redirect. If everybody uses all that time, we'd be 15 minutes over, but we'd be done with Dr. McFadden, which gives you much better preparation for summation. You'll be done with all the evidence. And then we can either -- we have the rebuttal, of course. So we could either take that from 10:00 to 11:30 and have a two-hour break before the cross or we can start at 11:00 instead of 10:00, so we have options.

Speaking of choice, we have options. We can either start at 11:00 or we can end at 11:30 and have a two-hour Whichever one you prefer: Either starting an hour break. later or having two hours to prepare.

MR. DUBNER: Our preference would be to take the time from today instead and keep the schedule as is.

THE COURT: No, no. Let's finish with Dr. McFadden. I didn't even give you that choice. Speaking of choice, the only choice I gave you was whether to start at 10:00 and have a two-hour break or start at 11:00 and have a one-hour break.

MR. DUBNER: I thought I would add a blue bus.

MS. WILKINSON: We choose 10:00, your Honor.

THE COURT: I think you prefer that, too.

MR. DIVER: Ten is fine.

THE COURT: Let's now take the hour and get the cross

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You're doing the cross, Mr. Dubner? 1 done.

MR. DUBNER: Do you know approximately when you'll want to take the five-minute break?

THE COURT: No. Do you have a preference on that?

MR. DUBNER: No.

THE COURT: If you did, I'd be happy to honor it.

MR. DUBNER: Actually, your Honor, could we take that five minutes now?

THE COURT: Sure. That's your preference?

MR. DUBNER: Yes.

THE COURT: Now we have this odd little time, 3:32, let's try to reconvene at 3:37 so we can really stick with only going over by 15 minutes.

MR. DUBNER: Sure thing.

(Recess)

(In open court)

THE COURT: Please be seated. We're ready to get started.

Mr. Dubner.

CROSS-EXAMINATION

21 BY MR. DUBNER:

> Q. Dr. McFadden, we're mostly going to focus on your reply declaration, but first, I'd like to talk about a couple of things you said a moment ago before the break.

> > First, you compared Dr. Noll's model to a scale, is

- that correct, a physical scale? 1
- I used a scale, physical scale as an example of a 2
- 3 scientific instrument that you would want to test whether it's
- 4 working properly. And I would say that Dr. Noll's demand model
- 5 is a scientific instrument. In the same way you would test the
- 6 scale that's working properly, you would test this model to see
- 7 if it's working properly.
- 8 Q. So a scale measures in a single observable physical
- 9 characteristic, isn't that right? It measures the weight of
- 10 things?
- 11 Α. Yes.
- 12 A discrete choice model doesn't measure an observable
- 13 physical characteristic, does it?
- 14 A. The bottom line of Dr. Noll's model is -- are observable
- 15 characteristics, such as the share of current league bundle
- subscribers who would end up switching by his calculation to an 16
- 17 à la carte package.
- 18 Q. And it measures many other characteristics as well, some of
- 19 which -- 66 of which you said that he matches well. Isn't that
- 20 correct?
- 21 It does measure other things, it's true; yes.
- 22 And you can buy a mass-produced scale off the shelf in a
- 23 store, right?
- 24 Α. Would you explain the question.
- 25 A scale like you describe, like you compared Dr. Noll's

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- model to, you can just buy that in a store and it would be the same as the same scale sold somewhere else, right?
- 3 A. If we're talking about a scientific scale, not necessarily 4 off of any shelf, no, but I don't see why that's germane.
 - Q. But I still, whether it's germane or not, would like an answer to that. A scale used to measure weight, you can buy some of those just off the shelf and they're mass-produced, they're the same thing; isn't that correct?
 - I would say that there are -- there are a variety of scientific scales available from various scientific warehouses used for various purposes. And you would -- you would -- if you're a scientist, you'd be well advised if you buy one of those scales to test it and make sure it's working.
 - Q. Dr. McFadden, I didn't ask about testing it, did I? I didn't ask about what scientists would do. I asked whether it was possible to buy a scale that measures weights in a store.
 - From a scientific supply house, yes.
- 18 Q. You can't buy a discrete choice model mass produced off the 19 shelf at a store, can you?
 - A. You could certainly buy a discrete choice model. simply have to hire someone to produce it for you.
- Q. Right. And it wouldn't be mass produced the same for a 23 wide range of things -- strike the question.

If you use a scale to measure something so extremely heavy that it broke the scale, you wouldn't expect it to

- produce reliable results necessarily, would you? 1
- It's certainly possible that you could do a falsification 2
- 3 test which would be off-scale, but even so, the idea is that if
- 4 there's some range that this scale is represented to be able to
- 5 weigh, it should show some degree of responsiveness over that
- 6 range.
- 7 Q. And then Dr. Noll, you said earlier that Dr. Noll failed
- scientific due diligence, he didn't collect data by doing a 8
- 9 survey. Is that right?
- 10 Could you provide a context for your question.
- 11 Earlier in your testimony today, you said that Dr. Noll's
- 12 model was scientifically wrong and unreliable because he didn't
- 13 conduct a survey; isn't that right?
- 14 I said that it was scientifically unreliable and that a
- 15 customary way a demand analyst would proceed in a situation
- like this would be to try to find additional data. 16
- 17 THE COURT: Suggested by survey.
- 18 THE WITNESS: Either finding or collecting a survey.
- 19 Q. You were deposed in this case a few months ago. Isn't that
- 20 right, Doctor?
- 21 Α. That's correct.
- 22 During that deposition, you were asked what you believe the
- 23 differences are between bundle purchases and other customers.
- 24 And you said at line 13 "If I'm led to believe they're not any
- 25 different then I would use that, but the thing is, I think it's

F3iglau5 McFadden - cross

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THE COURT: You have to read much slower.

MR. DUBNER: Yes, much slower.

- 4 Q. Just for time, let's focus on the last line. You said
- 5 "that would be not necessarily scientifically wrong but
- 6 certainly a less reliable than I think you could accomplish
- 7 | with a well very small investment in additional data."

Was that your testimony, Doctor?

- Wa. Yes.
- 10 | Q. Do you stand by that testimony?
- 11 | A. Yes.
- 12 | Q. Then one other thing on your testimony today, you raised
- 13 the fan of the game and superfan example, is that right?
- 14 A. I'm sorry. Are you switching away from this now to
- 15 | something else?
- 16 Q. Yes. I'm switching away from that.
- 17 A. Please repeat your question.
- 18 | Q. Sure. You mentioned the fan of the game and superfan
- 19 | examples today?
- 20 A. Yes. I mentioned those tests, yes.
- 21 | Q. You tested Dr. Noll's second model, too?
- 22 | A. "Too"?
- 23 | Q. That you ran against Dr. Noll's second model?
- 24 | A. I did.
- 25 | Q. Those tests no longer produce the results you claim are

- implausible with Dr. Noll's third model; is that correct? 1
- The third model was effectively designed -- built to pass 2 Α.
- 3 those tests; that's true.
- 4 So that's a "yes"? Q.
- 5 Well, if you -- I'm not sure -- I think it's a "yes," but
- 6 please repeat your question if you want a "yes" or "no" answer.
- 7 Q. We'll move on to your reply declaration, Doctor. Your
- first criticism in your reply declaration is that but-for-world 8
- 9 outcomes are not driven by the intensity of viewership, is that
- 10 right?
- 11 A. You're referring -- I'm sorry. I want to make sure I have
- 12 the right context. In my first declaration, that was the
- 13 conclusion of my falsifiability tests. I concluded that model
- 14 was not --
- 15 Q. I'm speaking about your reply declaration.
- The reply declaration. I'm losing track. 16 Α. Oh.
- 17 You have next to you a binder of declarations, a smaller
- white binder. 18
- 19 THE COURT: What?
- 20 MR. DUBNER: The smaller white binder.
- 21 THE COURT: Smaller white binder. I don't have that,
- 22 the smaller white binder. I have it this way.
- 23 Ο. If you can look at tab 14 --
- 24 THE COURT: Is that the reply declaration?
- 25 That's Dr. McFadden's reply declaration. I just want to

- McFadden cross
- 1 focus you on page three.
- 2 I have that page. Α.
- 3 Page three? 0.
- Yes. I have it in front of me. 4 Α.
- 5 Q. Your first criticism is the but-for-world outcomes are not
- 6 driven by intensity of viewerships, is that right? That's the
- 7 large header, number three.
- Yes. You're referring to paragraph seven? 8 Α.
- 9 Ο. Yes.
- 10 Α. Yes.
- 11 And to show this, you changed the actual data by cutting
- 12 the hours people viewed in half and then running the model with
- 13 those fictitious customers; is that right?
- 14 A. That was one of the tests of fit or reliability that we
- made; yes. 15
- That's for this criticism in your reply declaration, that's 16
- the only test you report, right, for the criticism that 17
- 18 but-for-world outcomes are not driven by the intensity of
- 19 viewership, you don't report any other tests?
- 20 This criticism is not based solely on those tests.
- 21 based on the mathematical properties of Dr. Noll's third model.
- 22 Q. And this is the only test that you report to demonstrate
- 23 it, correct?
- 24 Well, I'm sorry. Now I have to go back and review this.
- 25 haven't looked at it for a while.

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- We'll move on. Doctor, again, what this test consists of 1 is you changed the actual data by cutting the hours people 2 3 viewed in half and then running the model with those fictitious
- 5 That was the test that we did; yes.
 - And you're concerned about Dr. Noll's model because the prices stay relatively similar when you run these new consumers through it; yes?
 - That's my recollection. Α.

don't remember.

customers; is that right?

- Whereas in the real world, you'd expect prices to change significantly if people only wanted to watch half as many hours. Is that your point?
- 13 I would have to re-read the -- re-read my own declaration. 14 It's been a while. I didn't review it last night, so now I
 - The point that I take you to be making, and you reference this in response to -- the point I take you to be making, and tell me if you think this is wrong, is that you would expect prices to change significantly if consumers watched half as many hours as they do in the real world. Is that right?
 - I would expect some effect, but I would have to review my own experiment at this point to recall the details.
 - Do you recall, Dr. McFadden, when you made your modified dataset, you changed one thing in the data, right, you changed the number of hours people viewed and nothing else, right?

- That's my memory now, but I haven't reviewed that for seven 1 weeks, so I have -- I simply don't remember the details. 2
- 3 Did you review your declarations before coming in to 4 testify today?
 - Review my reply declaration? I did not go back and read
- 6 it. No.

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- 7 Did you review your first declaration?
 - Α. No.
 - Did you review any of Dr. Noll's declarations? Ο.
- 10 I looked through Dr. Noll's reply declaration. Α.
- 11 Okay. We are going to continue with this. I'm sorry, if
- 12 you need help jogging your memory, let me know. But so you

changed -- you just said you think you remember -- you changed

- 14 the number of hours people viewed, right, and nothing else?
- A. As I sit here, that I do remember doing something like 15 16 that, yes.
- 17 THE COURT: Look at paragraph eight right in front of 18 It says "I run Dr. Noll's model on these halved data and
 - Q. And the first sentence of that paragraph as well, your Honor, "As a new test for the relationship between damages and the data used in Dr. Noll's model, I take the estimated RSN viewing times for each subscriber and divide them in half."
- 24 That's the only change you made, right?

calculate but-for-world outcomes."

25 That is the change; yes.

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So in your artificial dataset, every viewer pays the exact 1 same price as actual consumers, don't they? 2

- A. I think that's not correct because what's happening here is that, once again, like my tests on his second model, you're giving his model a different dataset and it goes through its own machinations to produce prices. So the prices that prevail with this modified viewership data would reflect what Dr. Noll says the equilibrium would look like.
- Q. Right. Doctor, I'm asking about the data that you input. In the data you input, the viewing time was half of the real world but the price was identical to the real world, wasn't it? There is no price -- the price is determined within Dr.
- 13 Noll's model.
 - Q. Is that not an input into Dr. Noll's model, Dr. McFadden, the price that the actual viewers are paying, that's not something his model looks at at all?
 - In his model which -- in his equilibrium, price is determined by the -- by the balancing, by the equilibrium.

THE COURT: That wasn't the question. Was one of the input somewhere in his analysis the actual price paid, did he use that at any point as a baseline?

THE WITNESS: Well, he uses actual price in his Lerner calculation, which is one of the conditions he matches to.

So, the data that Dr. Noll uses and the modified data that you ran through his model for this test, they include the price

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- that people are paying, yes, in some form?
- Well, the answer is that in constructing tastes, he is 2 Α. 3 using information on actual price --
 - Thank you. I think that answers the question. Q.
- 5 A. -- via the Lerner index, but that now has nothing to do 6 with the prices that are -- that would be paid by the consumers 7 in the equilibrium of the model which is what's reported in this table. 8
 - Q. We haven't gotten to the table yet, Doctor. I'm just asking about the data inputs that you used when you ran this.

So you kept the Lerner index the same as Dr. Noll had, so the same actual price but half viewing time; yes?

- That's correct. Α.
 - So your hypothetical consumers in this test watch half as many hours, but as far as the data can show, the dataset that you entered with that Lerner index, they're happy to pay the exact same amount of money for the bundle as real consumers, aren't they?
 - This is a hypothetical exercise. It's saying that if people -- the subscribers were -- continued to be subscribers but did not view the things as intensely, then you would get a -- certain results.
- Q. And you don't say what in your -- you don't say in your declaration what you think the results should be, right?
- 25 My recollection is that it does not.

- 1 You just say that whatever the results should be, Dr.
- Noll's results probably aren't them, is that right? 2
- 3 I'm sorry? Α.
- 4 You don't say what you think the results should be when you Ο.
- 5 run this test; you just say Dr. Noll's results probably aren't
- 6 right. Is that right?
- 7 What I say is that what's going on here is the viewership
- data seems to make very little difference to the price that 8
- 9 comes out as equilibrium in his model; what seems to be driving
- 10 that is the Lerner index, that particular moment, not the
- 11 viewership patterns, not the intensity of viewership. This is
- 12 essentially another kind of a falsification test.
- 13 It's saying if the Lerner index moments stayed the
- 14 same and other data from consumers changed a lot, would you get
- 15 any different result? And the answer is you do not
- get -- almost no different result which suggests that it's 16
- 17 really hanging on that Lerner index.
- Q. And the Lerner index, as you said, reflects the price that 18
- 19 people are paying - it may reflect other things - but it
- 20 reflects the price that people are paying in the actual world,
- 21 right?
- 22 A. It reflects the price they're paying and it reflects an
- 23 assumption about the relationship between that and the demand
- 24 sensitivity of people.
- 25 We'll get to that as well. But Dr. McFadden, you would

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agree that your modified data, the consumers through the Lerner 1 index, the consumers are being reflected to being willing to 2 3 pay the exact same amount that actual consumers are and then

- you run those fictitious consumers through the data; isn't that right?
- This is a hypothetical exercise in which in this counterfactual world consumers are paying exactly what they have paid before, but instead of having their TV on for 12 hours, they have it on for six hours.
- So they pay exactly the same amount. Thank you. Let's move on to your next criticism.

Your next criticism is that Dr. Noll's model underpredicts the variety in RSN viewing and doesn't actually predict the distribution of favorite teams viewing times. that right?

- That's correct.
- 17 So let's look at table two. I think your counsel put up a different version of this but the same data earlier. Let me 18 19 make sure I understand this. The first number, for example, 20 the 22 percent, that's the percentage of people in the data who 21 didn't watch anything on a second RSN in 2012; is that right? 22
- A. Excuse me. I'm going to -- yes. I'm just comparing your 23 numbers with mine. Yes, that's correct.
 - And to come up with that number, you excluded Okav. everybody who watched even a single game on another RSN, right?

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- That's correct. Α.
- You excluded everybody who watched a single hour or even a 2 Q. 3 single minute on another RSN, right?
 - That's correct. Α.
- 5 So your number excludes everybody who just flipped through a different channel on the way to the favorite channel, right? 6
 - That's true. Α.
- And these are people who you are saying should be 8 9 considered as two or even "more than two" RSN viewers, right?
 - Yeah. This particular experiment says that if someone watches any RSN for any amount of time, they had some interest in it.
 - Q. Right. So somebody who clicked over to another game for a minute during a commercial break, they had some interest, right?
 - A. Certainly the spirit of this experiment is that they did that because they had some interest in doing that.
 - Q. Right. This would be somebody like Mr. Keyte who said yesterday he's a Yankees fan but he likes to check the scores in rival team's games. You're saying that even though he's predominantly a Yankees fan, he gets some utility from access to other channels in some idiosyncratic way and that should be modeled, right?
 - I'm saying that in the real data, which is all the data that Dr. Noll starts from, the indications you have about

tastes for diversity come from what people actually do. And if 1

- a person watches more than one RSN, that's an indication, for 2
- 3 whatever reason, that they have a more diverse interest in
- 4 teams than a person who watches a single RSN. That's my view.
- 5 Q. You're saying they have some interest in getting access to
- 6 other channels, and we may not know why, but we know they have
- 7 some -- we believe they have some interest.
- A. Yes. 8
- 9 Q. Dr. Noll does allow simulated consumers in the one favorite
- 10 team category to get utility from having the bundle, doesn't
- it? 11
- 12 That's true, but that utility from having the bundle all
- 13 comes from the disturbance or error in the logit model. And
- 14 that in itself is essentially a term which is there because
- 15 there's no data, there's nothing in the real data that explains
- That's -- and the role of that error in a 16
- 17 well-estimated logit model would be to account for the fact to
- 18 pick up on some people who are idiosyncratic.
- 19 Q. And just to be clear, when you say "error," you don't mean
- 20 a mistake. You mean a logit error term, which is in any model
- 21 of this sort?
- 22 A. Yes. Sorry. I would call it a disturbance rather than an
- 23 error; yes.
- 24 Okay. You said that the purpose of that is to pick up on
- 25 things that we can't observe from the data, right?

- Α. That's correct.
- So we can't observe just from the data the difference 2 Q.
- 3 between Mr. Keyte checking the Red Socks' scores just to find
- out how the Yankees' rival is doing and me just happening to 4
- 5 flip through the Yankees game on the way to my Red Socks game?
- 6 We have no way to know which consumer is which or what's really
- 7 driving that choice, do we?
- That's true. And in ordinary logit estimation, you would 8
- 9 allow the estimates to tell you how important those kinds of
- 10 idiosyncratic terms have to be in order to explain the choices.
- 11 That's actually not what Dr. Noll does.
- What Dr. Noll does is pick a number, nothing from the 12
- 13 real world, he picks a number and that establishes the weight
- 14 of that logit disturbance as opposed to everything that's
- 15 observed. And Dr. Noll happens to pick a number which gives
- that term an outsized weight. 16
- 17 Q. Dr. McFadden, let's go back to this chart for a moment.
- 18 The 22 percent who watch a single RSN, do you know what that
- number would have been if you hadn't excluded people who you 19
- 20 say watch one game on another RSN?
- 21 I have run that, but I don't have it in front of me. Α.
- 22 Q. Does it roughly double? Does that sound about right to
- 23 vou?
- 24 It goes up by -- whether it's double, what I can tell you
- 25 is these differences are less dramatic, but they're still

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- there; and they're sufficiently large so that I would still reach the bottom-line conclusion that it's not a reliable model.
 - Q. How close would it have to come to Dr. Noll's numbers for you to be convinced it was a reliable model?
 - I think there are statistical tests for that. You would take into account the number of avatars you have here, and you could do this calculation, but I can tell you with 30,000 avatars, it has to be pretty close.
 - Now, in your declaration, you didn't report a sensitivity Ο. analysis for this critique, did you?
- In my -- did I report a sensitivity analysis of what?
- 13 Of -- if you used your number, for example, instead of Dr. 0.
- 14 Noll's, you don't know whether the predicted prices would 15 change in any material way, do you?
- A. Well, I'm not sure what exactly the experiment would be. 16

Do you mean if I assigned people to his bin 1, the one-team fan in the proportion 22 percent rather than what he actually does, would that fit differently? Is that the question?

- If you force the model to match your numbers, sure.
- No. I haven't done that calculation.
- 23 So the second part of this criticism I think was that you 24 said that rather than model people who watch one RSN, people 25 who watch two RSNs, and then people who watch three or more,

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- Dr. Noll should have modeled people who watch one RSN, people who watch 2, 3, 4, 5, 6, all the way up to 29, 30; is that right?
 - I don't believe I said that. Α.
- If you can look at paragraph 20 in your declaration? THE COURT: Reply declaration?

7 I'm sorry. The reply declaration. MR. DUBNER: Yes.

THE COURT: Paragraph 20?

MR. DUBNER: Yes.

If you look at the second sentence, Doctor, it says "Instead of these equations, Dr. Noll should have matched the proportions of consumers that he predicts will watch a single RSN, two RSNs, three RSNs, etc. to the actual data."

Do you stand by that suggestion?

- A. Yes, I don't -- I don't necessarily mean by "etc." that he would match every one, but I would say that I think it would be reasonable to -- it would be reasonable in general to try to take account of the actual pattern of diversity in the real data. And to the extent that this model fails to match reasonable measures of diversity in the real data, then I think it's unreliable.
- Q. So you're not saying that only a model that has all 30 of those parameters can be reliable, right?
- I'm not saying that. I'm saying that what he does to this point with the conditions he actually matches using his moment

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method leave out ones which I think are very important for determining the bottom line, which is, how easily are people moved from the league package to à la carte channels and to what extent does that put pressure on the price of the league package.

- Right, right. Dr. Noll matched his set of moments. You're saying there's a somewhat different set of moments that he should have used instead. Is that fair?
- I would say there are additional moments, particularly on the important dimension of taste for diversity, which I believe in any reasonable model of consumer demand here will be closely tied to the sensitivity of people to content and price and their ability for new à la carte products to steal market share from the league bundle.
- Q. Now, back on the question of whether you need all 30 parameters, which you said you don't, in deciding how many parameters you need, how complex your model is going to be, you can make tradeoffs between improvements to the model's performance and the complexity, the computational difficulty of the model; is that right?

Α. Yes.

(Continued on next page)

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For example, Dr. Noll's model might have been more precise 1 if it had analyzed team pairs instead of individual teams, but 2 3 you are not criticizing Dr. Noll for not doing that, right? 4 I'm not sure. This question is that a follow-up question Α. 5 to the previous question, or are you changing subjects? 6 I thought I was using a slightly different subject to 7 follow up. But we can pass that. I think we've already -- we have agreed that you have to look at whether the improvements 8 9 will be worth the added complexity, right? 10 The way an empirical econometrician would ordinarily do 11 this is it you would fit the model to some what you consider to 12 be leading and important moments, and then you would have 13 additional moments, and you would then test whether the model 14 in fact fits those. And there are statistical procedures for 15 doing that. In fact that's pretty much a standard technique. Dr. Noll has not done those kinds of tests, so whether 16 17 additional moments in fact are needed, whether the model is consistent with the possible additional moments. 18 19 Those, by the way, are not complicated to do. 20 not the case that by considering whether additional moments are 21

consistent with the model that you have to do all kinds of equilibration and things like that to do that analysis. pretty straightforward second year graduate level econometrics.

- And you haven't run those tests either, right?
- I have not done any affirmative estimation, that's correct. Α.

- McFadden cross
- So, you don't know whether Dr. Noll's model actually 1
- performs quite well on those tests, do you? 2
- 3 A. Well, I do know, because I've looked at one. I looked at
- 4 the one that we just had a slide up on.
- 5 Is that a statistical test? 0.
- Well, that's not a statistical test, but I can tell you 6
- 7 that if it were a statistical test it would clearly reject the
- hypothesis that Dr. Noll's model is consistent with reality. 8
- 9 Q. But when we are talking about statistical tests, a model 10 doesn't -- let me restart the question.
- 11 A model doesn't need to exactly predict the actual 12 data to be reliable, right?
- 13 A. Not exactly, but the statistical standard would be if it's
- 14 a reliable model, then by statistical criteria it should fit it
- within a certain level of tolerance, a few standard deviations 15
- in the usual terminology of econometrics. 16
- 17 Q. Right. And those are objective standards you could have
- 18 presented to show that Dr. Noll's model is outside the range of
- 19 tolerance, right?
- 20 A. I could have done that. The numbers on the slide, I can
- 21 tell you that if you did that it would be far outside the
- 22 range.
- 23 Q. If you did that on that particular slide. But there are
- 24 many other things that you could have run those statistical
- 25 tests on in Dr. Noll's model, correct?

That's true.

- And you didn't cite any of those in your declaration, 2
- 3 right?

Α.

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- I did not run those tests, that's correct. Α.
- 5 And you haven't proposed any objective standard that the
- 6 court can use in deciding whether Dr. Noll's fit to the actual
- 7 data is close enough, have you?
- A. Well, I have not set out myself to do Dr. Noll's model in 8
- 9 an econometrically satisfactory way. I would hope that Dr.
- 10 Noll could do that for himself.
- 11 Well, let's go on to your next criticism. Your next
- 12 criticism is that Dr. Noll estimates missing RSN viewing times
- 13 in a biased manner. Is that right?
- Again, repeat the question and give me some context. 14
- 15 Q. Sure thing. If you look at page 8, the heading B in your
- 16 reply declaration.
- 17 Yes, I have reread the paragraph.
- 18 So, this criticism is that Dr. Noll estimates missing OK.
- 19 RSN viewing times in a biased manner, right?
- 20 Let me give a little background.
- 21 Just because we're short on time, doctor, I think it's a
- 22 yes or no question, and if we could get a yes or no, I would
- 23 appreciate that. Unless your Honor thinks that the background
- 24 is necessary.
- 25 Then please repeat the question, because I didn't hear it

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as a question requiring yes or no.

This criticism is that Dr. Noll estimates missing Sure. Ο. RSN viewing times in a biased manner, is that right?

> THE COURT: That's what the criticism says, right? THE WITNESS: For the National Hockey League, yes.

First tell me if this is an accurate summary of what Ο. OK. Dr. Noll did. So I want to know if this is an accurate summary. It will be on your screen if that's too far.

"After the first most-viewed team is identified, the games played by this team are ignored for the purpose of identifying the second most-viewed team; then the games of the first and second most-viewed teams are ignored when identifying the third most-viewed team and so on. Therefore, when a game is played between a more frequently viewed team and a less frequently viewed team, the viewership is always assigned solely to the more frequently viewed team."

Dr. McFadden, is that an accurate description of Dr. Noll's method of estimating missing RSN viewing times?

- That's my language, and that's my understanding of how he allocated subscribers to RSNs for the National Hockey League.
- 21 Q. Dr. McFadden, that's not actually your language, is it? 22 It's Dr. Ordover's language, isn't it?
 - A. No. Oh, is it? If it is, I thought you were taking a quote from my report.
 - Not this time, doctor. Sorry. If you go to Exhibit 5,

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McFadden - cross

- Joint Exhibit 5 in that declarations binder. We can put it up 1 2 on the screen.
 - A. First of all, I thought you were simply quoting from my Now, if you are saying this, I have to reread this. don't know where it came from.

THE COURT: He is telling you.

- I've never read Dr. Ordover's declaration.
- Well, let me rephrase it. Looking at it a moment ago, and not knowing what the source was, you said this was an accurate description of what Dr. Noll did to estimate missing RSN viewing times, right?
- I believe that that's the same as is in my report, that is, that's the description of what he did.
- Q. OK. And if you could go to the next letter. That's actually a description of exactly what Dr. Ordover did in his first declaration, isn't it? If you look at note 59 in his declaration.
- A. As I recall between these two slides, the language here in this Ordover declaration is the same as in the other Ordover declaration.
- 21 So, as far as you know, Dr. Noll used the exact same method 22 Dr. Ordover used, yes?
- 23 I'm sorry? Dr. Ordover, as far as I know, did not do this 24 calculation himself. This is Dr. Noll.
 - But he did try to estimate missing RSN viewing times, which

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McFadden - cross

is what you are saying Dr. Noll did wrong. Right? 1

MR. ECKLES: Your Honor, I just want to interpose an objection. He has now examined Dr. McFadden about something another expert did, that he has never reviewed before, and it's not what he was testifying about.

MR. DUBNER: We can move on, your Honor.

- In your declaration you don't propose a different way for assigning RSNs, do you?
- For the National Hockey League?
- 10 For anybody, for where the data is missing. Ο.
- 11 For the other leagues the feed or the RSN is identified in 12 the data, so there is no need to make this assignment.
- 13 Just to clarify that, doctor, it's identified for some of 0. 14 the observations but not all of the observations, right?
 - Α. Well, I do understand that's correct.
 - So you haven't -- whether it's for hockey -- we can stick with hockey for right now -- you don't propose a different way for assigning the missing RSN data, do you?
 - I simply point out that it produces results which are No. then inconsistent with the data in terms of patterns of viewing times.
- 22 Q. And you don't know whether it's possible to predict it any 23 more accurately than that, do you?
- 24 A. Do I know for a fact? Have I sat down to build a model of 25 allocation? No, I have not built a model to allocate people to

RSNs.

- And like we discussed, there are objective measures 2
- 3 economists use to assess the degree to which a prediction
- varies from a perfect fit. You don't report any of those here 4
- 5 either, do you?
- 6 You are now referring to my --
- 7 I'm sorry, yes, I'm talking about your critique that Dr.
- Noll estimates RSN viewing times in a biased manner. 8
- 9 A. My recollection is that I did not do any tests, that it was
- 10 clear from the data and the number of people we're dealing with
- here that these would be different. 11
- 12 Q. And one of the tests you didn't do is you could have done a
- 13 sensitivity analysis, right? You could have dropped this data
- 14 because the DirectTV and MLB.tv data, some of the observations
- 15 needed this method, some of the observations were fully
- specified. You could have dropped the observations where Dr. 16
- 17 Noll used this method and seen if the results changed
- 18 significantly, right?
- A. Yes, you could have done that. I did not do that. 19
- 20 Q. Right. Your concern is that using this method may have
- 21 caused Dr. Noll to overestimate damages in all three models,
- 22 right?
- 23 A. Well, I think my primary concern is simply that this is a
- 24 particular allocation method which does not match up well with
- 25 the real data.

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- The ultimate prediction Dr. Noll is making is the price of the bundle, is that correct?
- I think the feature of this particular allocation method is that it will tend to concentrate viewership on the most-viewed team basically for the reasons described. To the extent that it concentrates preferences, that's part of the pattern where I previously said that Dr. Noll seems to underestimate the taste

for diversity that are present in the real data.

Q. Well, you said in your declaration, "As a result, the league bundle will appear less valuable than it actually is, lowering its price in the "but for" world." That's paragraph 25, right? I'm sorry, your reply declaration, page 10, paragraph 25. Actually, doctor, in the interest of time, don't worry about it.

Would it reassure you that this wasn't biasing Dr. Noll's results if when you dropped the data where he used the algorithm from DirectTV and MLB.tv, damages for MLB.tv went down a tiny bit but damages for DirectTV went up a tiny bit? I would be encouraged by that result. Whether that has any impact for any implication for what was done for the NHL is quite unclear. You could get this result simply because a large share of the people in the baseball data did in fact have an identified RSN, and that was enough people like that to get this pinned down well.

All right. Well, let's go on to your next critique.

McFadden - cross

- next critique is that Dr. Noll used too big a number when he 1 estimated the size of the potential market for the bundles. 2 Ιs 3 that right?
- 4 Yes, as I stated in my direct. Α.
 - You said it on direct.
- 6 Yes. Α.

- 7 And this isn't challenging the design of the model; it's just changing the particular data input that Dr. Noll put into 8
- 9 it, right?
- 10 Well, let me step back a second and say that my criticism
- is not that it's too big -- although I think it's too big --11
- 12 but, rather, that he hasn't done the due diligence that I think
- 13 a scientist should do to try to make sure he is comparing
- 14 apples and apples. Because the league championship viewership
- 15 includes people who watch championship games but not regular
- season games; it includes people who are literally home-town 16
- 17 fans of the teams playing in the championship game who have no
- 18 interest in watching out-of-market teams. And due diligence
- would say you should at lest be worrying about that and doing 19
- 20 some careful calculation to make sure that you're not
- 21 improperly classifying people.
- 22 Q. Now, Dr. McFadden, you don't hold yourself out as an expert
- 23 on sports economics, right?
- 24 Α. I do not.
- 25 And you are not an expert on sports broadcasting or sports

- viewership, right?
- 2 I am not. Α.
- 3 And you agree that Dr. Noll is one of the country's leading
- sports economists and in particular one of the country's 4
- 5 leading sports broadcasting experts, right?
- 6 I agree that he is a leading figure in these two subjects,
- 7 yes.

- Q. Now, for your claim that he assumed too big a market and 8
- 9 didn't do his due diligence, the evidence you relied on was a
- 10 DirectTV study that reported a smaller market, right?
- 11 That is one that I reported in my declaration, yes.
- 12 Right, that's the only fact that you reported in your
- 13 declaration, right?
- 14 A. Yes, that's the only direct fact that I have access to
- myself. 15
- Q. Now, DirectTV wasn't estimating the same market Dr. Noll 16
- 17 was, was it?
- A. Well, I think that DirectTV number, it was not one that he 18
- should have used without due diligence either. I think the 19
- 20 whole point -- my point from a methodological point of view is
- 21 that if you are going to be a careful scientist about this you
- 22 should be more careful about pulling up numbers, moments like
- 23 this, which are actually quite critical to the analysis.
- 24 just needs to be more careful. He has been very casual about
- 25 this up to this point.

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part of your problem with this.

- Dr. McFadden, your point isn't just that he has been too 1 casual -- I take it that's your point -- but you also think 2 3 that the larger the number he uses, the lower the predicted 4 prices and the higher the predicted damages. Right?
 - A. Well, I know from testing his model with different assumptions on what the market share is, that is, essentially different assumptions from what the number of possible fans is, does change the results of his model. Yes, I have run that comparison.
 - Q. And so you have run, say, the smallest number that you reported, the number for DirectTV, out-of-market fans in that survey?
 - A. Yes, I did that for the second model. I don't recall doing it for the third model.
 - And it still showed damages to all consumers even when you used the smallest number you recommended, didn't it?
 - A. Well, I think Dr. Noll's model is going to produce damages for consumers for some of the reasons that I have stated. As I said, they're done in the second model. Like the scale that always reads five pounds, Dr. Noll's model is always going to read some damages no matter what is going on with any real-word consumer behavior.
 - MR. DUBNER: Permission to approach, your Honor? Dr. McFadden, I'm going to hand you two exhibits.

McFadden - cross

are internal estimates from MLB and NHL discussing the 1 viewership for the World Series in 2012, the year Dr. Noll is 2 3 using. I'm going to ask you not to say any of the numbers in 4 them because counsel has designated them highly confidential. 5 If you could just turn to page 2 in Exhibit 2, which is the MLB 6 study. 7 THE COURT: I'm sorry. This is marked as Exhibit 2? 8 MR. DUBNER: Not on your copy, sorry, just on his. 9 THE COURT: But it is. 10 MR. DUBNER: Yes, Plaintiff's Exhibit 2. 11 THE COURT: OK. 12 If you could read that third bullet point to yourself. 13 That estimate is five times bigger than the estimate Dr. Noll 14 used, right? 15 A. The third bullet point? It starts with nine. Is that the 16 one you're referring to? 17 THE COURT: The four games? 18 MR. DUBNER: Yes. 19 THE COURT: Are you in the baseball one? Give him one 20 second.

21 THE WITNESS: Sorry. You said page 2. I turned to 22

the real page 2.

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THE COURT: The third bullet point says the four games.

THE WITNESS: I'm back to the four games.

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McFadden - cross

THE COURT: OK. He's saying that figure which we're not going to say in court was four times bigger than what Dr. Noll used.

MR. DUBNER: Five times bigger.

THE COURT: Five times bigger than what Dr. Noll used, right?

- Is that your recollection? Yes.
- First of all, could you explain what that number is? Is that the cumulative viewership for each of the games?
- 10 Over the four games, the audience, the number of viewers of 11 unduplicated, different.
 - A. And now the statement is that's four times the number --THE COURT: Five times bigger than the number used by Dr. Noll.
 - A. Actually I don't know what the relationship is between this number and the number used by Dr. Noll.
 - That's fine. I'll also direct you -- and your answer may be the same, which is fine -- if you could look at Exhibit 3, the other one, which is 2012 playoff reach analysis.

THE COURT: What page?

MR. DUBNER: This is also the second page, the first page after the cover sheet.

Q. If you could look, doctor, at the second bullet point below Stanley Cup. I can't read the first two words, but it's then "unduplicated viewers who watched the Stanley Cup".

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THE COURT: Unduplicated North American viewers?

MR. DUBNER: Just below that. 2

THE COURT: Oh, OK. The one that says total season?

MR. DUBNER: I'm sorry, the sub bullet, the line -- do you have a problem?

> The line as opposed to the bullet. THE COURT:

MR. DUBNER: The line as opposed to the bullet.

THE COURT: OK. The line as opposed to the bullet says XX people unduplicated U.S. viewers watch this year's Stanley Cup.

MR. DUBNER: Yes, thank you.

- Q. Dr. McFadden, do you recall -- this estimate is ten times bigger than the estimate Dr. Noll used, isn't it?
 - A. Again, can you explain? By unduplicated viewers do you mean you are actually keeping track of individuals, so even if they watched three games or one game they still are counted as one? Is that what you mean?
 - Right, unduplicated. Ο.
- OK. Where do numbers like this come from? Α.
- You may have to ask NHL, but if you look at the source at the bottom it says Nielsen, doctor.
- Α. OK.
- 23 Regardless, we are running short on time, so ...
- 24 THE COURT: He's just saying that number which we are 25 not reading out was ten times larger than what Dr. Noll used.

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Do you know that?

THE WITNESS: I don't have Dr. Noll's number in front of me, but I accept your arithmetic.

THE COURT: You accept, OK.

- Q. And if that's correct, and you are correct that larger market sizes mean higher damages, then Dr. Noll's estimates could be extremely conservative, couldn't they?
- The number that he is using? Then I have to ask what his number is, because it's represented in his declaration as the viewership or the average viewership. So you're telling me his declaration states this incorrectly?
- I'm now talking about the predicted damages, doctor.
 - No, I understand you are talking about the denominator and the share that Dr. Noll is using, and you are saying that despite his declaration says it's the World Series viewership or the Stanley Cup viewership, it's in fact not, it's some small fraction of that?
- It could be a lower bound, yes, of the viewership.
 - Well, I don't recall his saying that he was doing something conservative there in taking one tenth of the actual number. don't recall his saying that.
 - Q. He did say repeatedly in his declaration he was attempting to say lower bound, a conservative estimate of damage, right?
- I don't remember it specifically, but if you say it's there, fine.

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- Dr. McFadden, let's go to your last criticism. Your last criticism is that Dr. Noll blacked out home teams but not visiting teams, is that right?
- You're again referring back to my --Α.
- 5 Your reply declaration, yes. It's going to be page 12 of 6 your reply declaration, which again is the last thing in that 7 It's the criticism with the heading six: Dr. Noll does not correctly account for in-market blackouts. Right? 8 9 Yes. Α.
 - You agree that the steps he took to black out teams were correct, right? You just don't think they're sufficient.
 - Oh, I think the primary issue that I originally raised as a question was that in his analysis of utility maximization his model fit to the data. He was not taking into account that if you bought the league bundle there were still certain games you were not going to be able to see because they were blacked out.
 - Yes, Dr. McFadden. That was your original --
 - A. He did not correct for that, and I believe he has not still in the third model corrected for that in the estimation states. So my original criticism is one to which he has not yet responded.
 - Q. And in paragraph 31, that last sentence, when you said, "While these steps are correct, they are not sufficient, leading Dr. Noll to incompletely account for in-market blackouts, " you stand by that statement, right?

- Α. Yes, I do.
- OK. You say that the correct approach to accounting for 2 Q.
- 3 in-market blackouts would cap the possible viewing time for
- 4 each team based on the actual number of games that can be
- 5 viewed within a particular HTT.
- 6 Yes. Α.

- 7 This would affect the results only to the extent that there
- 8 are consumers who would watch enough games to reach that cap,
- 9 right?
- 10 No. Well, yes, but --
- 11 Ο. OK, that's a yes.
- 12 -- but it's important in the sense that if you can never
- 13 watch -- if you can never watch your favorite team watching a
- 14 local team because that's always blacked out, then that's
- something that may be very valuable to you that you can't get. 15
- But following what you say is the correct approach, the 16
- 17 only difference the model would show is to the extent that some
- 18 people watch more games than the cap, right?
- 19 A. Well, that would be the primary place where it would come
- 20 into play in the mathematical model as Dr. Noll has set it up,
- that's correct. 21
- 22 Q. OK. Would it surprise you if only less than half a percent
- 23 of people in hockey reached that cap?
- 24 I don't recall doing that calculation myself, at least I
- 25 don't recall the numbers, but, yes, it's a very small share.

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- 0. OK. And it's the same with baseball, a very small share.
- That's my recollection. Α.
- 3 And you don't report any sensitivity analysis about this
- 4 critique, do you?
 - No, I have not done that.
- 6 OK. Dr. McFadden, this isn't the first time you have 0.
- 7 rendered an opinion that the plaintiffs' expert in a class
- action or antitrust case failed to meet scientific standards, 8
- 9 is it?
- 10 It's not the first time -- please say it again.
- 11 Sure thing. This isn't the first time you have rendered an
- 12 opinion that the plaintiffs' expert in a class action or an
- 13 antitrust case failed to meet scientific standards, right?
- 14 A. Please remind me of what you're thinking of, because I
- 15 don't recall being involved in any class action before.
- THE COURT: In some other case where you were 16
- 17 retained, did you find that the plaintiffs' expert did not meet
- 18 the scientific standard in his or her report? In some other
- 19 case that you were retained in did you ever say that?
- 20 THE WITNESS: I have certainly objected to the
- 21 scientific standards of opposing witnesses. Not in a class
- 22 action. Because I don't recall that I have ever testified in a
- 23 class certification phase.
- 24 Q. Let me give you some examples. In Comwood Company v. U.S.
- 25 New York Tobacco -- which was not a class action but it was an

McFadden - cross

- antitrust case -- you filed an amicus brief claiming the report 1 of the plaintiffs' expert was unscientific and should have been 2
- 3 excluded under Daubert. Right?
- 4 That was not testimony, but of course it was part of Α. 5 an amicus brief.
- 6 And in Natchitoches Parish Hospital Service District
- 7 v. Tyco International -- an antitrust class action -- you filed
- a declaration claiming the report of the plaintiffs' expert was 8
- 9 unscientific and should be excluded under Daubert. Right?
- 10 I don't recall whether it was relative to Daubert, but I do
- 11 remember testifying in that case, and I don't remember the
- 12 details of what part of the proceeding that was.
- 13 Q. And in Cook v. Rockwell International -- another class
- 14 action -- you filed another declaration claiming the report of
- the plaintiffs' expert was unscientific and should be excluded 15
- 16 under Daubert. Right?
- 17 Again, I don't recall the "under Daubert" part.
- 18 testify in that trial.
- Q. And in In Re Pharmaceutical Industry Average Wholesale 19
- 20 Price Litigation -- another class action -- you filed another
- 21 declaration claiming the report of the plaintiffs' expert was
- 22 unscientific and should be excluded. Right?
- 23 Can you say the name again of the case?
- 24 Sure thing. In Re Pharmaceutical Industry Average
- 25 Wholesale Price Litigation.

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McFadden - cross

- Again, I'm sorry, I'm hearing the words, and I'm not 1 connecting it to a case I remember. 2
- 3 THE COURT: In Re pharmaceutical --
- 4 Pharmaceutical Industry Average Wholesale Price Litigation. Q.
 - Oh, AWP? Is that the one? Α.
- That sounds right. 6 0.
 - I testified in that. I actually don't remember now what I testified about.
- 9 In every one of those cases, doctor, you said the 10 plaintiffs' expert report was unscientific, was fundamentally 11 flawed, made technical or mathematical or statistical errors,
- 12 things along those lines. Yes?
- 13 That's the kind of thing that I look for. I'm an Α. 14 econometric methodologist, and I tend to be retained in cases 15 where there is an issue of econometric methodology, and so,
- 17 Q. And in every one of those cases the court rejected your 18 position and found that plaintiffs' expert testimony
- 19 sufficiently reliable to satisfy Daubert and be admitted, 20 right?
- 21 A. Oh, that I don't know. I do not follow the legal case.
- 22 This is only about my fifth or sixth time in court in the last
- 23 50 years. I don't have much dealings with lawyers.

yes, those are the kinds of things I look at.

- 24 So, when you give an opinion -- I don't blame you.
- 25 when you give an opinion that something is unreliable and

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McFadden - cross should be excluded, you don't then check to see if judges 1 disagree with you and your standard is maybe not the same as 2 3 the standards court apply, is that right? 4 Oh, my standards for scientific reliability are the same as 5 I would use for academic work. How that plays out in the legal system is your guys' problem, it's not my problem. 6 7 MR. DUBNER: Thank you, doctor. No further questions. THE COURT: All right. Redirect? 8 9 MR. EKLES: No redirect. 10 THE COURT: Thank you, Mr. Eckles. 11 Thank you, doctor, we are done for the day. 12 We are reconvening tomorrow morning at 10 o'clock with 13 Dr. Noll on rebuttal, and we have an hour and five minutes on 14 direct and then 30 minutes on cross, and then we break until 1:30. OK? 15 16 MS. WILKINSON: Your Honor, may I ask one question? 17 THE COURT: Yes. MS. WILKINSON: I think it was yesterday -- I can't 18 19 keep track of the days. You noted to plaintiff --20 THE COURT: You can start down, doctor. 21 Doctor, yeah, carefully. 22 Go ahead.

THE COURT: Oh, I was just making a careful point.

MS. WILKINSON: You noted to plaintiffs I think during

the opening a question you wanted them to address in closing.

F3I7LAU6 McFadden - cross

MS. WILKINSON: We just want to make sure since we don't have a jury here, and we are only addressing you, is there anything you want us to be prepared to discuss at closing.

THE COURT: Not in particular. I'm sure you will cover all the bases, no pun intended.

OK. See you tomorrow.

(Adjourned to March 19, 2015 at 10:00 a.m.)

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