

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF VERMONT

GREEN MOUNTAIN CHRYSLER-	*
PLYMOUTH-DODGE, et al.	*
	*
THE ASSOCIATION OF	*
INTERNATIONAL AUTOMOBILE	*
MANUFACTURERS	*
	*
V	*
	*
GEORGE CROMBIE, Secretary	*
of Vermont Agency of	*
Natural Resources, et al.	*

\* Civil File No. 05-302 & 304

TRIAL BY COURT  
Tuesday, April 10, 2007  
Burlington, Vermont

WITNESSES:  
Alan Weverstad

BEFORE:

THE HONORABLE WILLIAM K. SESSIONS III  
Chief District Judge

COURT REPORTER: JOHANNA MASSE, RMR, CRR

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1 after quarter of 3. And my expectation is we probably will  
2 go till 4:30, which is generally -- well, in light of the  
3 fact we started at 8:15, a longer day, but that's fine.  
4 Okay?

5 (A recess was taken.)

6 THE COURT: All right. Mr. Weverstad, do you want  
7 to come forward?

8 THE WITNESS: Sure. Learning where I'm supposed  
9 to be is hard.

10 THE COURT: Well, I've been a judge for 12 years.  
11 I still don't know where I'm supposed to be, so it's okay.

12 Okay.

13 MR. PAWA: Matt Pawa for the defense. May it  
14 please the Court.

15 THE COURT: Yes.

16 CROSS-EXAMINATION

17 BY MR. PAWA:

18 Q Good afternoon, Mr. Weverstad.

19 A Hello, Matt.

20 Q You said you joined GM in 1971; is that correct?

21 A January 1971 was when I started full time.

22 Q That was a very interesting time for the automobile  
23 industry; was it not?

24 A All times are interesting, but certainly that was, as  
25 well.

1 Q In 1970 the Clean Air Act was enacted, correct?

2 A That's correct.

3 Q And that required reductions in traditional pollutants,  
4 not greenhouse gases but traditional pollutants, on the  
5 order of 90 percent by 1975; is that correct?

6 A That's correct.

7 Q Hydrocarbons, carbon monoxide, NOx, correct?

8 A Yes.

9 Q And in 1975 EPCA was enacted, correct?

10 A Yes.

11 Q And for the first time that established fuel economy  
12 standards, correct?

13 A Yes.

14 Q This was a time of great challenge and change for the  
15 automobile industry; was it not?

16 A Yes.

17 Q Today for Mr. Hemley you described a maximum technology  
18 scenario, correct?

19 A Yes. I described our maximum technology scenario.

20 Q An engineering exercise in which you prophesied great  
21 harm to the automobile industry if the AB 1493 standards are  
22 upheld, correct?

23 A I only spoke for General Motors, but I would assume  
24 it's similar.

25 Q Fair enough. For General Motors.

1                   And if -- if not following the maximum technology  
2 scenario, you also testified that GM would simply pull  
3 models from the market; is that correct?

4     A     Yes.

5     Q     In -- in making these prognostications, did General  
6 Motors go back and check any of its prior prognostications  
7 when the Clean Air Act was coming along in 1970 to see how  
8 accurate they were?

9     A     No, we did not.

10    Q     Did you check any of your prognostications when the  
11 CAFE law, EPCA, was coming along in 1975 to see if they were  
12 accurate?

13    A     No, I did not.

14    Q     Wouldn't you agree that it would be helpful to check  
15 and see if prognostications, very much like those you've  
16 made today, were also made by GM in the early 1970s yet  
17 proved possibly incorrect?

18    A     I don't see the relationship.

19    Q     I'm going to show you a document we've marked as  
20 Defendant's Exhibit 2551.

21                   MR. PAWA: Your Honor, does the original go to you  
22 or to the witness?

23                   THE COURT: The original goes to the witness.

24    Q     This document is entitled "Federal Regulation of Motor  
25 Vehicle Emissions Under the Clean Air Act Amendments of



1 1970," and it appears in the Ecology Law Quarterly Volume 4,  
2 Page 495, in 1975. And I'm also going to give you a  
3 blown-up page because the print is small.

4 A I have my glasses, though, so I could read it.

5 Q Would you please read for the Court on Page 515 the  
6 statement in the early 1970s from General Motors' Vice  
7 President Ernest Starkman.

8 MR. HEMLEY: I'm going to have to object, Your  
9 Honor. There's no foundation yet for reading from this  
10 document in any way.

11 THE COURT: You need to lay a foundation. He is  
12 the 30(b)(6) witness. He has -- as I understand it, he's  
13 testifying on behalf of General Motors Corporation. Is  
14 there any indication that General Motors Corporation would  
15 have known about this particular article or contributed to  
16 this article in any particular way? Do you know that?

17 MR. PAWA: Not that GM contributed to it, but if  
18 you look at the footnote, 97, that accompanies the quote,  
19 Your Honor, it refers to a remand decision at the  
20 Environmental Protection Agency, refers back to an earlier  
21 footnote from 93, so this document is quoting from a  
22 government record that was a remand decision from the D.C.  
23 Circuit to the Environmental Protection Agency.

24 MR. HEMLEY: Well, Your Honor, there simply is no  
25 authentication. This is an article that was written by a

1 lawyer for the Public Interest Research Group. Who knows  
2 how accurate these various statements are or whether they've  
3 been properly vetted? We just don't know.

4 THE COURT: Well, you know, I appreciate that, but  
5 it does say remand decision, hearing transcript at; I guess  
6 a D.C. Circuit opinion?

7 MR. PAWA: An EPA remand hearing on remand from  
8 the D.C. Circuit, Your Honor. If you look at Page --  
9 Footnote 93 in the prior page.

10 THE COURT: Okay.

11 MR. HEMLEY: The problem with this, Your Honor, is  
12 that what we have here -- and I'm not doubting the good-  
13 faith representations at all, but what we have here are  
14 several paragraphs out of undoubtedly a much longer  
15 document. There's no way I -- I can look at this document  
16 and know what came before or after the quoted language. So  
17 it's really simply inappropriate, and it's obviously  
18 hearsay, and there's no exception to the hearsay rule of  
19 which I am aware that would allow Mr. Pawa to cross-examine  
20 until there is an adequate foundation laid.

21 THE COURT: Okay. Well, this is from a transcript  
22 of -- well, tell me again. Where is this from?

23 MR. PAWA: The Environmental Protection Agency  
24 hearing on a remand decision from a challenge to a ruling by  
25 the EPA, and the remand came from the D.C. Circuit back down

1 to the agency.

2 THE COURT: Okay. And have you verified the  
3 accuracy of that particular --

4 MR. PAWA: Your Honor, I was not --

5 THE COURT: -- paragraph?

6 MR. PAWA: -- able to get ahold of that remand  
7 transcript.

8 THE COURT: All right. Well, this is a court  
9 trial, and for what it's worth, the Court will permit you to  
10 ask the question. Go ahead.

11 BY MR. PAWA:

12 Q Could you read that statement by Vice President  
13 Starkman of General Motors.

14 A Those are the two -- the paragraph that follows his  
15 name there?

16 Q Yes.

17 MR. HEMLEY: May we at least have -- and I don't  
18 want to interrupt. I really don't. I'm especially aware of  
19 the time pressures here. May we at least understand that  
20 he's not necessarily reading the statement of the vice  
21 president of General Motors. He's reading what was reported  
22 by this lawyer in this article, and that's the weight to  
23 which it should be -- which it should be given. We just  
24 don't have a basis for knowing exactly how accurate or  
25 inaccurate it is to suggest that this was a statement by a

1 General Motors anything.

2 THE COURT: Well, as I read this -- and this is  
3 the difficulty with this. As I read this, it is taken from  
4 a transcript of that particular hearing, and the logical  
5 conclusion is that GM Vice President Starkman testified  
6 exactly to this, and that those are his words. That's the  
7 logical analysis here from Page 29 through 30. But it's --

8 MR. PAWA: Thank you, Your Honor.

9 THE COURT: Go ahead.

10 MR. PAWA: Thank you.

11 THE COURT: I mean, you should have had the  
12 transcript here regardless. Go ahead. Ask your question.

13 MR. PAWA: Thank you, Your Honor.

14 THE WITNESS: "If GM is forced to introduce  
15 catalytic converter systems across the board on 1975 models,  
16 the prospect of an unreasonable risk of business catastrophe  
17 and massive difficulties with these vehicles in the hands of  
18 the public must be faced. It is conceivable that complete  
19 stoppage of the entire production could occur with the  
20 obvious tremendous loss to the company, shareholders,  
21 employees, suppliers, and communities. Short of that  
22 ultimate risk, there is a distinct possibility of varying  
23 degrees of interruption with sizable dislocations."

24 BY MR. PAWA:

25 Q Mr. Weverstad, do you recall GM making predictions in

1 the early 1970s that catalytic converters could cause GM to  
2 potentially shut down?

3 A No, I do not.

4 Q Do you know if the installation of catalytic converters  
5 did cause GM to shut down?

6 A We installed catalytic converters beginning in 1975.

7 Q And it did not cause any substantial business  
8 interruption for General Motors, did it?

9 A I was a laboratory test engineer in 1975, so if it --  
10 if it did or didn't, I was unaffected. Didn't know about  
11 it.

12 Q And again, it's your testimony that in putting together  
13 the maximum technology scenario for this case and in putting  
14 together the prognostications about pulling vehicles from  
15 the market, GM never went back to look at its predictions  
16 for what would happen in response to the 1970 Clean Air Act,  
17 correct?

18 A No, we did not.

19 Q I'm going to show you what's been marked as Defendant's  
20 Exhibit 2552.

21 A Am I finished with this one?

22 Q Yes, sir.

23 A Do you want it back?

24 Q You can keep it.

25 A All right.

1 Q This document is a letter from the Automobile  
2 Manufacturers Association dated August 27, 1970, to Senator  
3 Ed Muskie of the Senate Environment Committee, and I would  
4 direct your attention, please, to Page 1578, which is the  
5 third page of the document.

6 And let me ask you first, do you know who the  
7 Automobile Manufacturers Association was at that time?

8 A I -- based on what I know now, I -- I know what they  
9 were. At that time I'd never -- never stepped foot in  
10 there.

11 Q Based on what you know now, who is that entity?

12 A It is the forerunner of the Alliance of Automobile  
13 Manufacturers, I would -- I would guess.

14 Q And the Alliance is a plaintiff in this case, correct?

15 A Yes.

16 Q And General Motors is a member of the Alliance,  
17 correct?

18 A Yes.

19 Q Okay. Could you please read the paragraph beginning,  
20 "It presently appears."

21 MR. HEMLEY: I'm going to object again, Your  
22 Honor. We are even further appealed with this exhibit than  
23 we were with the previous one. Mr. Weverstad is not here as  
24 a representative of the Alliance of Automobile  
25 Manufacturers, and he certainly isn't here as a

1 representative of the Automobile Manufacturers Association,  
2 and to now ask him to endorse statements with which he is  
3 totally unfamiliar made by organizations which he is not  
4 representing and which are no longer in existence is  
5 objectionable. It's pure hearsay, and there's no exception  
6 that I am aware of that would satisfy this question.

7 THE COURT: Well, just to put this in context,  
8 this is a letter from the Automobile Association --  
9 American -- Automobile Manufacturers Association?

10 MR. PAWA: This is included in the -- the  
11 committee hearing records of the Senate Environment  
12 Committee, Your Honor. We pulled it from a law library, and  
13 it was included in the legislative history of the 1970 Clean  
14 Air Act.

15 THE COURT: Okay. Well, it seems to me he's a  
16 representative of General Motors. I mean, arguably you had  
17 some connection to General Motors in the earlier submission.  
18 That's not the case here other than the fact they're just  
19 members; and also, by the way, he didn't even start working  
20 full time for General Motors until 1971, which is one year  
21 after this letter was written. So this -- I agree with  
22 Mr. Hemley that that is a bit far afield. There might be  
23 other ways in which you can introduce his testimony as a  
24 party to this case, but as far as cross-examination of him,  
25 he can't be testifying in any particular way about

1 statements from the American Manufacturers -- Automobile  
2 Manufacturers Association because he doesn't represent them  
3 in any way. So the objection is sustained --

4 MR. PAWA: Yes, Your Honor.

5 THE COURT: -- as to this document.

6 MR. PAWA: Yes, Your Honor.

7 THE COURT: Okay?

8 BY MR. PAWA:

9 Q Mr. Weverstad, it's your testimony that General Motors  
10 has not gone back to look at any of the prognostications  
11 with respect to the -- EPCA, the Energy Policy and  
12 Conservation Act of 1975, or the Clean Air Act of 1970 in  
13 formulating the max technology scenario or the potential to  
14 remove models from the market in Vermont or other AB 1493  
15 states, correct?

16 A No, I did not.

17 Q General Motors expects to be in compliance in 2009 and  
18 2010 with the AB 1493 regulations under its current product  
19 plans; is that correct, Mr. Weverstad?

20 A For -- under the current plans -- let me look for sure.  
21 I don't want to make a mistake for you. In Vermont in 2009  
22 and '10 for trucks, we would be in compliance, and for  
23 passenger cars for 2009.

24 Q And you're pretty close -- looking at Plaintiff's  
25 Exhibit 900, you're pretty close for passenger cars/LDT1s



1 for 2010, correct?

2 A We're -- we're actually pretty close for 2010 in being  
3 noncompliant, and on -- on the trucks, and pretty close to  
4 being, within a squidge there, size of the number.

5 Q My question was simply whether or not GM is very close  
6 to 2010 to being in compliance for passenger cars/LDTs.

7 A I guess the only -- only question that I have is  
8 what -- what does "very close" mean?

9 Q Well, what's the numeric size there?

10 A I can't -- I can't give you that number. I would agree  
11 that we're certainly closer than we are in 2011.

12 Q It looks from the chart like you're at about 29.6 for  
13 the standard and about 29 even for where you expect to be in  
14 2010, correct, for passenger cars?

15 MR. HEMLEY: I'm sorry to interfere, Your Honor,  
16 but we made -- we went to great lengths, as the Court has  
17 acknowledged, to avoid the introduction of specific data  
18 with respect to these charts, which is why we established  
19 them as approximate. We will concede that the chart shows  
20 what the chart shows, but unless there is -- if this is to  
21 be persisted, I think we need to approach the bench and  
22 discuss whether this would fall into the category of  
23 information of such importance that it is appropriately part  
24 of the --

25 THE COURT: The parties have stipulated to the use

1 of the chart, as I understand it. The chart was provided by  
2 the plaintiff, not objected to by the defendant. The chart  
3 was being used. The chart shows that in 2009 and 2010  
4 there's a relatively close relationship between GM's  
5 expectations as to where they will fall and -- and the  
6 standards under the regulations, so let's not make a federal  
7 case out of this -- this particular point, and -- so I'd  
8 move on.

9 BY MR. PAWA:

10 Q Mr. Weverstad, you'll be able to use a credit from 2009  
11 for the passenger cars to help you comply for 2010, correct?

12 A Yes. And I would -- I would point out that 6/10ths of  
13 a mile, while it looks close numerically, in our business a  
14 tenth of a mile per gallon is a dramatic improvement.  
15 Certainly well within the range of things that can be done.  
16 But when you get up to a number like .6, that's -- that's a  
17 significant change. Even though numerically it looks very  
18 close.

19 Q But you will be able to -- to help comply in 2010 using  
20 a carry-forward credit from 2009, correct?

21 A We would -- under -- yes. Under these assumptions, we  
22 would have some credit in 2009.

23 Q Now, AB 1493 was enacted in 2002; is that correct,  
24 Mr. Weverstad?

25 A AB 1493 I believe was passed by the legislature in that

1 year.

2 Q And the regulations were proposed in September 2004,  
3 correct?

4 A Yes.

5 Q And they were adopted in September 2005, correct?

6 A Yes.

7 Q And General Motors submitted comments during the  
8 rule-making process, correct?

9 A Yes, we did.

10 Q And you're not aware of any major changes in the last  
11 two or three years in General Motors' forward-looking  
12 product plans, are you?

13 A In the past two -- we make changes to our product plans  
14 every -- every quarter, every month. So once again,  
15 depending on changes, you know, I don't know where you're  
16 headed with me, but certainly we make changes.

17 Q Do you recall testifying at your deposition that you  
18 were not aware of any major changes in the last two or three  
19 years in your product programs?

20 A Once again, I very well may have --

21 MR. HEMLEY: Can I have the page and line number  
22 if we're going to be confronting --

23 THE COURT: He's asking the general question at  
24 this point. He's not using specifically the page and line  
25 number. So if he remembers testifying to the deposition,

1 that's fine. If not, then you can show him the page number  
2 and tell Mr. Hemley what the page number --

3 MR. PAW: It was the September 2006 deposition,  
4 Page 175, lines 34 through 15, and we're going to go ahead  
5 and play it for you.

6 MR. HEMLEY: Excuse me, Your Honor. Whoa.

7 THE COURT: Wait. Wait a second. Wait.

8 MR. PAWA: Yes.

9 THE COURT: You've he got a pending question as to  
10 whether or not he remembers whether he made those statements  
11 or not.

12 MR. PAWA: Right.

13 THE COURT: And I haven't heard Mr. Weverstad's  
14 response --

15 MR. PAWA: Thank you.

16 THE COURT: -- to that particular question.

17 So do you remember responding in the way that  
18 Mr. Pawa just indicated; that is, that there were no major  
19 changes in the product plans over the past couple of years?

20 THE WITNESS: Under my definition of "major  
21 changes," I probably said that. I don't specifically  
22 remember it, but that's something that I likely would have  
23 said.

24 BY MR. PAWA:

25 Q We're going to show it to you now to refresh your

1 recollection.

2 [Video clip of deposition of Alan Weverstad  
3 played as follows:

4 Q. Were you involved in any discussions within General  
5 Motors about a significant change in product mix, the kind  
6 of vehicles that you would expect to be producing over the  
7 next three to four or five years compared to what you were  
8 looking at two or three years ago, whether it's due to  
9 changing oil prices or other kinds of conditions?

10 A. I'm not aware of any major changes in the last two  
11 or three years in our product programs.

12 Q. You haven't been involved in any discussions in  
13 that respect?

14 A. I have not been in any discussions.]

15 THE COURT: Okay. That's in relationship to  
16 product mixes or programs; is that --

17 MR. PAWA: Yes.

18 BY MR. PAWA:

19 Q That was a true statement; was it not, Mr. Weverstad,  
20 in your deposition?

21 A What -- yes.

22 Q All right. GM has a five-year business plan; does it  
23 not, Mr. Weverstad?

24 A Yes, it does.

25 Q Does the five-year business plan include the

1 elimination of any particular models from the Vermont market  
2 or any other AB 1493 market?

3 MR. HEMLEY: Excuse me, Your Honor. There's,  
4 again, an intrusion into an area that we have specifically  
5 negotiated would not become part of this trial. At least  
6 not in a public way. It's specific with- -- plans to  
7 withdraw specific products from specific marketplaces is  
8 confidential, and it's exactly what we're talking about.

9 THE COURT: Well, my understanding is that there  
10 would be inquiry into general model types, et cetera, and is  
11 that the question that you're asking; or are you asking for  
12 him to identify specific vehicles that he wishes to -- or  
13 that GM wishes to terminate?

14 MR. PAWA: I'm not going to ask for the names of  
15 any specific models. I'm asking whether or not the  
16 five-year plan includes pulling specific models from the  
17 market. In other words, has the decision been made as part  
18 of the five-year plan.

19 THE COURT: Well, all right. But you're not  
20 asking him to go into the details --

21 MR. PAWA: No.

22 THE COURT: -- of what product lines they've  
23 identified as removing -- as being removed from the market.

24 MR. PAWA: Correct, Your Honor.

25 THE COURT: Okay. As to the general question

1 whether or not GM has a plan in its -- part of its five-year  
2 plan to eliminate any types of vehicles in any general area,  
3 is there such a plan?

4 THE WITNESS: Not yet. We can close -- we can  
5 shut off production fairly quickly. The -- those vehicles  
6 are sold nationwide. So, therefore, if we chose to stop  
7 production for Vermont, that would be fairly easy to do. So  
8 we do not yet have a specific plan that lists specific  
9 models to shut off.

10 BY MR. PAWA:

11 Q You have no business plan that's approved beyond the  
12 five-year horizon; is that correct, Mr. Weverstad?

13 A We do not have an official business plan beyond the  
14 five-year horizon.

15 Q And you do not have a CAFE forecast beyond the  
16 five-year horizon; is that correct?

17 A We have a CAFE forecast beyond the five-year horizon.  
18 There exists one of those.

19 Q Do you recall testifying at your deposition that you  
20 don't have a forecast of CAFE beyond 2011, which at that  
21 time was five years out from your 2006 deposition?

22 A Well, maybe I could better explain what we do have and  
23 what we don't have. What we do have is beyond 2011, is we  
24 take the information that we have for 2011 and we carry it  
25 forward. We -- we don't make any changes. So I don't know

1 how you want to characterize that, but that's what we have.

2 Q Do you recall testifying in your deposition that in  
3 GM's submissions to NHTSA where it projects future fuel  
4 economy, anything past 2011 is just guessing from year to  
5 year?

6 A Educated guessing, yes.

7 Q I'd like to show you what's been marked as Defendant's  
8 Exhibit 2554.

9 A Thank you.

10 Q This document is titled "Written Testimony of G.  
11 Richard Wagoner, Jr., Chairman and CEO, General Motors  
12 Corporation, Before the House Energy and Commerce Committee  
13 Regarding Climate Change and Energy Security." Do you  
14 recognize this document?

15 A Yes, I do.

16 Q Directing your attention to Page 3. Yes. The third  
17 page of the document. Could you read, please, the sentence  
18 in the middle of the page starting with, "The most." "The  
19 most recent fuel economy."

20 A In the middle of the page.

21 Q Paragraph begins, "In addition."

22 A Yes. Okay. I see that. All right. After -- the --  
23 yes. I see the sentence. You want me to read that  
24 sentence?

25 Q Yes, sir.



1 A "The most recent fuel economy rule for light trucks has  
2 now set in place increases for seven consecutive years, 2005  
3 to 2011, increasing the standards by 16 percent, about 2  
4 percent per year, and for the first time adding to the  
5 regulated fleet the largest SUVs in the market."

6 Q That was a true statement; was it not?

7 A Yes.

8 Q And last week when you were deposed, did you not say  
9 that you did not know what portion of the maximum technology  
10 scenario cost figures include the cost that would be  
11 incurred by GM anyway in order to comply with the increasing  
12 CAFE standards?

13 A That's what I said.

14 Q And was that correct?

15 A At the time it was correct.

16 Q And have you changed the maximum technology scenario in  
17 the last week?

18 A No. What we did was we calculated the cost and sent  
19 you a memo along those lines so that the costs that we  
20 showed today reflected your suggested change.

21 Q Directing your attention back, please, to Plaintiff's  
22 Exhibit 903.

23 A I don't have those numbers on it, so --

24 Q This would be the notebook for Mr. Hemley.

25 A This?

1 Q Yes, sir.

2 MR. HEMLEY: It's Number 18.

3 THE WITNESS: Okay. That's better.

4 A Yes, sir.

5 Q The CAFE forecast -- or I should say the fuel economy  
6 forecast for GM is flat all the way out from 2011 to 2016,  
7 correct?

8 A That's correct.

9 Q And why does it not take into account the increasing  
10 fuel economy standards of the federal government?

11 A Well, because the federal government hasn't increased  
12 the standards beyond 2011 yet.

13 Q But you expect to be in compliance with changing CAFE  
14 standards; do you not?

15 A Yes, I do.

16 Q And GM has been in compliance in the last ten years,  
17 correct, and paid no fines?

18 A That's correct.

19 Q And is this really GM's best estimate that CAFE  
20 standards will simply stay flat after 2011?

21 A If -- if you recall on our charts, we showed the little  
22 flashlight beam that showed a low and a high, so we actually  
23 predict that the fuel economy standards will increase. How  
24 much, we don't know. That's why we have a low and a high  
25 range.

1 Q In putting together the maximum technology scenario,  
2 did GM use as a baseline a fuel economy average for GM's  
3 fleet that would be in noncompliance in future years?

4 A A baseline for what purpose?

5 Q For calculating noncompliance and costs.

6 A We -- we changed that after our deposition of whenever  
7 that was - was that last week or the week before - so that  
8 it took into account anticipated increases.

9 Q So does the baseline in the maximum technology scenario  
10 as you've described it today take into account the changing  
11 CAFE standard from year to year?

12 A It takes into account the costs associated with meeting  
13 them, yes.

14 Q And does it -- does it assume that GM will be in  
15 compliance in all future years?

16 A Yes.

17 Q Did the maximum technology scenario attempt to grapple  
18 with the issue of whether or not Congress or EPA would begin  
19 regulating greenhouse gases at any time between now and  
20 2016?

21 A We did not take into account what Congress may or may  
22 not do.

23 Q So you essentially assigned a zero probability chance  
24 of that happening, correct?

25 A We did not assign any probability, and in fact, if you

1 take a look at our charts, once again, there is a range  
2 that's associated with what we think might happen.

3 Q Mr. Weverstad, GM sells clean diesels now; does it not?

4 A We sell diesels that meet the existing emissions  
5 standards.

6 Q In recent years diesels have gotten much, much cleaner;  
7 have they not?

8 A Yes, they have.

9 Q GM sells clean diesel engines now for SUVs and trucks,  
10 correct?

11 A We sell diesels only above 8500 pounds.

12 Q But you do -- you do sell them for SUVs and trucks,  
13 correct?

14 A No SUVs. Only -- only trucks.

15 Q And does GM make a profit on those sales?

16 A I don't believe that I'm at liberty to tell you if we  
17 make a profit or not on those.

18 Q Are you losing money on them?

19 MR. HEMLEY: Same -- same -- I didn't object  
20 earlier, but this invades the same issue, Your Honor.

21 Thank you, Mr. Weverstad, for alerting us.

22 THE COURT: All right. Objection sustained. But  
23 can I just ask, you have a clean diesel engine now -- a  
24 clean diesel transmission now over 8500 pounds. Is there  
25 some technological reason why that clean diesel engine could

1 not be provided for vehicles under 8500 pounds?

2 THE WITNESS: That particular engine is a very  
3 large V8 truck engine, so it wouldn't fit in many vehicles.

4 THE COURT: Sure. But technologywise, why -- if  
5 you can make it for a big truck like that, why can't you  
6 make it for a smaller vehicle?

7 THE WITNESS: Well, in -- two items here. Number  
8 one, the emissions standards are reduced for vehicles above  
9 8500, so the stringency is somewhat reduced. We are looking  
10 at developing a smaller diesel engine that we could put into  
11 sport utilities. We have not released that yet.

12 Q GM currently offers diesel engine options for nearly  
13 all of its passenger-size cars in Europe; is that correct?

14 A Yes.

15 Q I'm going to show you what's being marked as  
16 Exhibit 25- -- Defendant's Exhibit 2555.

17 A Thank you.

18 Q This document is a printout from GM's Web site entitled  
19 "Clean Diesels Dispel Outdated Dirty Image." Do you  
20 recognize this as a printout from GM's Web site?

21 A Yes.

22 Q Down towards the bottom it says - this is the second to  
23 last paragraph in the middle of the page - "One of every  
24 three new cars sold in Europe is powered by clean diesel  
25 technology, and in the premium and luxury categories more

1 than 70 percent are clean diesels." Do you know if that's a  
2 true statement?

3 A I don't know the specific numbers personally, but since  
4 it's in this document, I -- I would -- would assume they're  
5 correct.

6 Q You have no reason to doubt that, do you?

7 A No, I do not.

8 THE COURT: Do you see -- ordinarily, before you  
9 read from a document, you introduce it into evidence unless  
10 it's a prior inconsistent statement, and then it's even  
11 introduced just for that limited purpose. Are you seeking  
12 to introduce this particular document so that, therefore,  
13 you could read?

14 MR. PAWA: Yes, Your Honor.

15 THE COURT: Okay. Is there any objection to -  
16 well, let's see - DX 2555, which is apparently taken from  
17 GM's Web site?

18 MR. HEMLEY: I don't think that -- no. I'll just  
19 say no. No objection.

20 THE COURT: All right. Now, that's admitted.

21 (Defendant's Exhibit 2555 was received in  
22 evidence.)

23 THE COURT: Now that you've read from it, you can  
24 go on.

25 MR. PAWA: Yes. Your Honor --

1 THE COURT: I'm sorry.

2 MR. PAWA: Let me offer the prior one, as well.

3 THE COURT: Okay.

4 MR. PAWA: The statement from Mr. Wagoner into --  
5 I think I got ahead of myself. Let me -- let me offer that  
6 one, as well, into evidence, as well.

7 THE COURT: Any objection to -- do you have that  
8 marked?

9 MR. PAWA: We did, Your Honor, and it was 2554.

10 THE COURT: 2554. Any objection to 2554?

11 MR. HEMLEY: I just want to understand the  
12 proffer. Is the suggestion that the entirety of these  
13 documents are going into evidence for consideration by the  
14 Court, or are we limiting the offer to those portions which  
15 are read?

16 THE COURT: Well, at this point he's offering the  
17 entire exhibit.

18 MR. HEMLEY: Well, I need to spend a moment and  
19 look at the Wagoner statement, then, but I can certainly  
20 avoid interrupting the examination. We can do that later.

21 THE COURT: Go ahead.

22 MR. PAWA: Your Honor, we introduced it last week  
23 at the deposition that Mr. Hemley attended, so he's seen it  
24 before.

25 MR. HEMLEY: I've seen a lot of things in the last

1 week, Your Honor. I don't remember all of them.

2 MR. PAWA: Okay.

3 BY MR. PAWA:

4 Q So directing your attention to the next sentence:

5 "These vehicles produce a net effect of 30 percent to 60  
6 percent fewer greenhouse gas emissions than comparable  
7 gasoline engine models and get significantly better fuel  
8 economy." Is that a true statement?

9 A Yes.

10 Q And --

11 A In Europe. These are European cars you're speaking of.

12 Q Well, would those cars emit fewer greenhouse gas  
13 emissions if they were used outside of Europe, Mr.  
14 Weverstad?

15 A Well, they can't be used in the United States because  
16 they don't meet the vehicle emissions standards, but if they  
17 were, they would produce less than I guess -- I don't know  
18 what the baseline is here, either. But certainly they're an  
19 improvement, we agree.

20 Q You have no reason to quarrel with that 30 to 60  
21 percent figure, do you, Mr. Weverstad?

22 A No, I do not. I just don't know what baseline they're  
23 measured to.

24 Q And the last paragraph of that first page states,  
25 "Despite limited availability and lack of consumer



1 knowledge, nearly one in three new vehicle buyers in the  
2 U.S. said they would consider purchasing clean diesel  
3 technology, approximately the same number that stated they  
4 had heard of the technology according to a J.D. Power &  
5 Associates survey." Do you know if that's a true statement?

6 A Once again, it's included in here, so I assume it's  
7 true. I did not do the study. I have not seen the study,  
8 so I don't know, but we wouldn't have included it if it  
9 wasn't true, I suppose.

10 Q GM wouldn't put something false on its Web site?

11 A Not that I'm aware of. Of course not.

12 Q In Europe GM sells a diesel hybrid, the Opel Astra,  
13 that gets about 59 miles per gallon; is that correct,  
14 Mr. Weverstad?

15 A I'm not certain of that -- of your numbers, no. But --

16 Q Does that sound wrong to you?

17 A I'm not -- I'm not familiar with the -- with the actual  
18 data on that vehicle, no. But does it sound wrong? No.

19 Q GM has just introduced a new 6.6-liter V8 turbo diesel  
20 in August of 2006; is that correct?

21 A Yes.

22 Q And the engine is revised to meet new stringent 2007  
23 federal emissions regulations; is that correct?

24 A For heavy-duty vehicles, yes.

25 Q That's correct, yes? And GM has just introduced a new

1 V6 clean diesel engine to be sold in Europe in Cadillacs as  
2 announced last month; is that correct, Mr. Weverstad?

3 A Yes.

4 Q And GM is developing a diesel version of its light  
5 trucks, light trucks, for the U.S. market; is that correct?

6 A Yes.

7 Q And Saturn is exploring clean diesels; is that correct?

8 A Certainly exploring is -- yes.

9 Q For sale in the U.S., correct?

10 A Possibly.

11 Q And there's no engineering reason why diesel engines  
12 cannot go into passenger cars; is that correct?

13 A If you have the right size vehicle and enough radiator,  
14 meets the emissions standards, I suppose you could put a  
15 diesel engine in, yes.

16 Q A diesel engine is more efficient than a gasoline  
17 engine; is that correct?

18 A A diesel engine burns fuel that has more energy per  
19 gallon, yes.

20 Q That was not my question. My question is whether or  
21 not the engine itself is more efficient than a gasoline  
22 engine.

23 A The efficiency of a diesel engine is slightly greater  
24 theoretically than the theoretical efficiency of a gasoline  
25 engine, yes.

1 Q And that's why in general diesels get better fuel  
2 economy than gasoline engines, correct?

3 A I would say the reason they get better fuel economy is  
4 because there's more energy per gallon.

5 Q But the engine itself is more efficient than the  
6 gasoline engine, correct?

7 A We're talking the difference between 32 to 33 percent  
8 and maybe 34 to 35 percent.

9 Q And some of that gain in efficiency -- some of that  
10 gain in efficiency is lost in terms of the CO2 advantage of  
11 those cars, is it not, because the fuel -- the diesel fuel  
12 has more carbon per gallon than a gallon of gasoline,  
13 correct?

14 A That's correct.

15 Q And so when an automobile company ramps up the  
16 productions of diesels in its fleet and you average the  
17 effect of those diesels across the entire fleet, you do not  
18 get a direct one-to-one relationship in the improvement of  
19 fuel economy and the reduction of CO2 emissions, correct?  
20 Want me to try it again?

21 A Yeah. That was -- you said a lot of words there, so --

22 Q Yup. Yup. Okay. If you increase the number of  
23 diesels that you sell in the United States and you take an  
24 average effect on fuel economy, that average effect on fuel  
25 economy will not bear a one-to-one relationship with the

1 average impact of the fleet CO2 emissions, correct?

2 A Just like we talked about earlier where gasoline has a  
3 certain relationship fuel to CO2, diesel has a similar  
4 relation- -- a relationship, just different numerically.

5 Q For an individual car?

6 A For an individual car or multiple numbers of cars.

7 Q But when you average diesels across your fleet, you  
8 testified at your deposition, did you not, that there was a  
9 difference impact that did not bear a one-to-one  
10 relationship on fuel economy versus CO2 emissions, correct?

11 A If I said that, I may have misspoken. There is a  
12 direct relationship. It is not the same relationship as  
13 gasoline, but there is a consistent relationship.

14 Q Doesn't it have to be true as a matter of basic math,  
15 Mr. Weverstad, that if some of the efficiency gain of the  
16 engine is lost in terms of the CO2 benefit because there's  
17 more carbon in a gallon of diesel than gasoline, then you  
18 cannot have a one-to-one relationship between the impact on  
19 average fuel economy and the impact on average fleetwide CO2  
20 emissions?

21 A I guess I'm -- I'm -- you've got me confused as to what  
22 you mean by "a one-to-one relationship" here. Maybe if we  
23 took a piece of paper and wrote it down for me, I'd  
24 understand better, but --

25 Q Well --

1 A I am certainly confused by what you're telling me now.

2 Q I'm going to show you a piece of your deposition to  
3 refresh your recollection.

4 MR. CLUBOK: Can you tell us what page it is  
5 before you put it up?

6 MR. PAWA: Yeah. This is Page 108 of the April  
7 deposition, Line 21, through Page 109, Line 16.

8 [Video clip of deposition of Alan Weverstad  
9 played as follows:

10 Q. Are you familiar with the fact that diesel fuel has  
11 more carbon in it per gallon than gasoline?

12 A. Has more energy as well.

13 Q. Right. Are you familiar with those facts?

14 A. Yes.

15 Q. Are you familiar with the fact that a diesel engine  
16 is more efficient than a gasoline engine?

17 A. Slightly more efficient, yes.

18 Q. And it's true, is it not, that when you average  
19 diesel vehicles across your fleet, you don't get an exact  
20 one-to-one relationship between the fleet average change in  
21 fuel economy and the fleet average change in greenhouse gas  
22 emissions?

23 A. There is a different relationship with the  
24 greenhouse gas.]

25 / / /

3rd

1 BY MR. PAWA:

2 Q That was a true and honest statement; was it not,  
3 Mr. Weverstad?

4 A That's what I said. And also my collar was up. I  
5 apologize for that. But I -- what I meant -- I'm not sure  
6 what you think I meant, but what I meant is there's a  
7 different amount of carbon content in a gallon of diesel  
8 fuel than in a gallon of gasoline. Everything beyond that,  
9 I don't know what you're talking about, so --

10 Q Mr. Weverstad, let's talk about ethanol. GM is an  
11 industry leader in ethanol with more than 2 million E85  
12 flexible fuel vehicles on the road in the U.S., correct?

13 A Yes.

14 Q And you -- as you said before, you have an annual  
15 production of more than 400,000, correct?

16 A Yes.

17 Q And GM has flex-fuel vehicles on the road in all 50  
18 states, correct?

19 A At this time we do.

20 Q And ethanol burns cleaner than gasoline, emitting fewer  
21 smog-forming substances; is that correct?

22 A Yes, it does.

23 Q The number of ethanol stations is growing rapidly; is  
24 it not?

25 A We have now something just under 1200 ethanol stations

1 in the country out of about 170,000, so it doesn't take much  
2 to make it look like it's growing rapidly.

3 Q Are you familiar with GM's Web site which states that  
4 the number of ethanol stations is growing rapidly?

5 A I think, once again, growing rapidly, with only 1200,  
6 50 stations is a big increase.

7 Q And GM publicly touts its role prominently in  
8 increasing the number of E85 stations around the country;  
9 does it not?

10 A Yes, it does.

11 Q And GM is part of a program, the 25 by '25 program,  
12 intended to expand biofuels to supply 25 percent of the  
13 nation's transportation needs by the year 2025, correct?

14 A Yes.

15 Q Do you believe that that goal is achievable?

16 A 25 by '25?

17 Q Yes, sir.

18 A We certainly hope so.

19 Q In 2006 GM committed to double its production of E85  
20 vehicles by 2010, correct?

21 A Yes. Double the number we're building now.

22 Q And in November of 2006 GM went further and said it is  
23 prepared to make fully half its annual vehicle production  
24 biofuel capable by 2012, correct?

25 A Providing that the E85 fuel is available, yes.

1 Q Are you familiar with the well-to-wheels analysis under  
2 AB 1493 for measuring the CO2 impact of an ethanol-capable  
3 vehicle?

4 A I'm familiar with well-to-wheel studies on E85, yes.

5 Q And you're familiar with the AB 1493 standard that  
6 imposes a well-to-wheels analysis on the CO2 emissions?

7 A Yes.

8 Q And are you familiar with how the well-to-wheel  
9 analysis of CO2 emissions from corn ethanol compares with  
10 gasoline?

11 A Yes.

12 Q And that's an improvement over the gasoline CO2  
13 emissions; is it not?

14 A Yes, it is.

15 Q In its Live Green, Go Yellow ad campaign, GM tells the  
16 American people that use of ethanol reduces greenhouse gas  
17 emissions, correct?

18 A Yes.

19 Q You indicated before that E85 ethanol, when -- strike  
20 the question.

21 When you are operating a flex-fuel vehicle on E85,  
22 it has a cruising range that is about 25 percent shorter  
23 than the same vehicle operating on gasoline, correct?

24 A Well, it's -- has a potential that's about 27 or 28  
25 percent less range, but because of the high octane, it -- we



1 hope it does even better than 25 percent.

2 Q Is there another way of describing that shorter range?

3 A Yes, there is.

4 Q What's that?

5 A Less fuel economy.

6 Q So --

7 A In miles per gallon.

8 Q In miles per gallon.

9 So E85 vehicles get worse fuel economy but have  
10 better impact on CO2 emissions, correct?

11 A Yes. From a well-to-wheel analysis.

12 Q Has GM asked the California Air Resources Board about  
13 how it could comply with AB 1493 using ethanol?

14 A We have not asked about AB 1493.

15 Q Has GM looked at ethanol as a means of compliance with  
16 AB 1493?

17 A We have looked at it and found some problems.

18 Q Do you recall testifying in your deposition that GM had  
19 not looked at ethanol as a means of compliance with AB 1493?

20 A I think we're quarreling with small words. As I said,  
21 we did -- I believe we talked about did we talk to the Air  
22 Resources Board about complying with AB 1493, and the answer  
23 to that is no. The reason that we haven't looked at  
24 compliance is because we took a look at a list of problems  
25 and said it wouldn't be -- it's not an available option for

1 us.

2 Q So GM is not looking at ethanol as a means of  
3 compliance right now?

4 A That's correct.

5 Q And you have not been asked to do so by management,  
6 have you?

7 A No, I have not.

8 Q Does GM sell to fleets in California?

9 A Presently we sell E85 vehicles in California.

10 Q Does GM sell cars generally to fleets in California?

11 A Oh, I'm sorry. Yes, we do sell cars to fleets in  
12 California.

13 Q And into other states around the country, correct?

14 A Yes.

15 Q And some fleets can monitor and record the ethanol --  
16 the actual ethanol usage of a flex-fuel vehicle to see if  
17 it's actually been -- strike the question.

18 Some fleets can actually monitor and record the  
19 ethanol usage to ensure and record that the flex-fuel  
20 vehicle is being operated on E85 and not gasoline, correct?

21 A I suppose that you could do that.

22 Q GM has an on-board diagnostics proprietary device  
23 called OnStar, correct?

24 A That's correct.

25 Q Could you describe OnStar.

1 A OnStar is a device installed on vehicles that allows  
2 you to make phone calls; it allows you to ask for  
3 assistance; sends safety if you -- if the air bags are  
4 deployed; other things.

5 Q It monitors the -- OnStar has the capability to monitor  
6 the actual operation of the vehicle, correct?

7 A It monitors many devices on the vehicle, yes.

8 Q Scores of devices, correct?

9 A I don't know the exact number of devices it monitors,  
10 but certainly --

11 THE COURT: Getting away from ethanol at this  
12 point?

13 MR. PAWA: No. My -- my --

14 THE COURT: Because I have some follow-up  
15 questions about that, but go ahead.

16 MR. PAWA: My logic will become apparent in just  
17 one moment, Your Honor, if I could continue. It's coming  
18 right back to ethanol.

19 THE COURT: All right. Then I'll wait for my  
20 question.

21 A There is a question that I haven't answered? I'm  
22 sorry.

23 Q Is there any engineering reason why OnStar cannot be  
24 used to monitor the actual ethanol usage of a flex-fuel  
25 vehicle?

1 A Presently I'm not aware that we have -- are able to  
2 monitor the actual usage of ethanol in a vehicle. We -- we  
3 monitor many devices. We're taking a look at it. But we  
4 don't store that information. So it is a window of data  
5 that we record. It is a subscription service that after one  
6 year expires. So even -- even if there was a way to  
7 determine if the engine's using ethanol or not, I'm not sure  
8 we -- we have that data and can share that data. There's  
9 privacy concerns, as well.

10 Q Mr. Weverstad, my question is whether or not there's  
11 any engineering reason why OnStar or some other similar  
12 on-board diagnostic device cannot be used to monitor the  
13 actual ethanol usage of a vehicle.

14 A I think there's a potential problem of how you store  
15 all that much information, and I'm not sure it has been  
16 shown yet that we can actually monitor the alcohol content  
17 of the fuel.

18 Q But is there an engineering reason why that's not  
19 possible? You're a trained engineer; are you not,  
20 Mr. Weverstad?

21 A Yes. I'm trying to think of -- I'm trying to think of  
22 reasons why -- it's very difficult to prove a negative, so  
23 with -- with the constraints that I've given you, I guess I  
24 don't know of a reason why we couldn't, but clearly we'd  
25 have to make a lot of changes in the system in order to make

1 it work.

2 Q And -- and OnStar currently measures the actual fuel  
3 economy of the vehicle that it's actually getting on the  
4 road; is that correct?

5 A What it does is it measures the amount of fuel through  
6 the system and how many miles it travels and does the  
7 calculation.

8 Q And it sends an e-mail to the customer every month,  
9 correct?

10 A Many vehicles also have that by just pushing a little  
11 button on your car that will keep track of the fuel economy  
12 measuring how much flows out of the tank and how much goes  
13 through the -- and how many miles you travel. Yes.

14 Q My question is simply whether or not the OnStar system  
15 sends an e-mail report of the OBD, on-board diagnostic,  
16 tests to the customer every month.

17 A It does send a diagnostic report out, yes.

18 Q Does the max technology scenario use E85 ethanol  
19 flex-fuel vehicles in any fashion as part of the potential  
20 means for compliance with AB 1493?

21 A No, it does not.

22 MR. PAWA: Your Honor, did you want me to pause so  
23 you could ask a question?

24 THE COURT: Thank you.

25 I just -- I want to ask you a little bit more

1 about E85. You testified that -- essentially that by using  
2 ethanol, E85, the rate of E85, there would be a reduction in  
3 fuel economy at the same time there would still be, at least  
4 vis-a-vis gasoline, a reduction in CO2, as well. Is that  
5 what I understand you to say?

6 THE WITNESS: Well, what I said, or what I meant  
7 to say in case I -- I didn't, there is a greenhouse benefit.  
8 So there's less total CO2 emitted on a well-to-wheel basis.  
9 But because -- the fuel economy is reduced because there is  
10 less energy in a gallon of ethanol than there is in a gallon  
11 of gasoline. It has alcohol, which has its own oxygen with  
12 it. So that if you -- if you look and say from the tailpipe  
13 how much CO2 benefit is there from an E85 vehicle, the  
14 benefit is only due to the fact that ethanol has some higher  
15 octane and we're able to calibrate for some small  
16 improvements in -- in fuel economy because we add more spark  
17 to it. The real benefit of ethanol is in the total  
18 well-to-wheel analysis, not in driving the vehicle.

19 THE COURT: Okay. Well, when you're talking about  
20 gasoline, you -- you described a mathematical formula;  
21 basically from CO2 emissions from the tailpipe, you can  
22 determine what fuel economy is and vice versa.

23 THE WITNESS: Right.

24 THE COURT: Is there such a corresponding  
25 mathematical formula in regard to E85?

1 THE WITNESS: Yes, there is.

2 THE COURT: Is it different?

3 THE WITNESS: It is different because the amount  
4 of carbon in the fuel is different between gasoline and E85  
5 as well as it's different from the -- the carbon content in  
6 diesel fuel. But it's the same process. It's a known  
7 process. It's a mathematical calculation.

8 THE COURT: And assuming that you're using  
9 flex-fuels so that the ratio of ethanol to gasoline may be  
10 anywhere between zero and 85 percent ethanol to gasoline,  
11 how do you use a mathematical formula to calculate that if  
12 in fact you've got no -- by way of OnStar or some other way  
13 of calculating how much ethanol you're using, you can't  
14 really figure out how much ethanol was being used in the  
15 gas.

16 THE WITNESS: You're exactly right. The formulas  
17 that we're talking about are when you have a known specific  
18 fuel. When we run our emissions test procedures and our  
19 fuel economy test procedures, we have a very defined, very  
20 specific fuel that -- that we know the exact makeup of the  
21 fuel and carbon content. When it gets into the real world,  
22 it's -- it's not the same calculation. And it varies  
23 from -- from station to station; it varies on the amount of  
24 alcohol. So you're exactly right.

25 THE COURT: Well, so as a general matter, if more

1 ethanol was used in gasoline -- I just want to make sure  
2 that I understand this. If more ethanol was used in  
3 gasoline, would in fact on the average the CO2 ratio go down  
4 from a particular mile -- or gallon as opposed to the fuel  
5 economy? And that is, fuel economy is -- is decreased, but  
6 at the same time the CO2 may be decreased, as well? On the  
7 average?

8 THE WITNESS: On the -- yeah. On the average E85  
9 will give -- from a tailpipe, will give a small CO2 benefit.  
10 Very small. Where you get the real benefit -- greenhouse  
11 gases is well-to-wheel.

12 THE COURT: Sure. No. I understand that.

13 THE WITNESS: And so what you've said is -- you're  
14 exactly right. Because you have to use more fuel to travel  
15 the mile, you end up making -- the fact that there's less  
16 carbon in a gallon, because you use more gallons, it -- it  
17 gets eaten back up again.

18 THE COURT: Sure.

19 THE WITNESS: So the numbers --

20 THE COURT: So the fact is your average per  
21 gallon, your average mileage per gallon, goes down.

22 THE WITNESS: Right.

23 THE COURT: But also, because it's ethanol, you  
24 also have, of course, a reduction in --

25 THE WITNESS: Yes.



1 THE COURT: -- CO2 emissions.

2 THE WITNESS: Just a slight difference.

3 THE COURT: Okay.

4 THE WITNESS: From the tailpipe.

5 THE COURT: All right. Okay.

6 BY MR. PAWA:

7 Q Mr. Weverstad, could you explain what a well-to-wheels  
8 analysis is?

9 A A well-to-wheel analysis assumes the entire cycle that  
10 it takes from drilling a hole in the ground -- that's where  
11 the well came from. In the case of ethanol, we -- we farm  
12 it, but it's from the -- from the time the oil is -- or the  
13 gasoline is -- the fuel is created, I should probably say,  
14 from the beginning to the end. From the beginning of  
15 producing the fuel to the end where it's driving the vehicle  
16 forward.

17 Q So are you familiar with the term "upstream benefits"?

18 A Yes.

19 Q Could -- and could you explain how that relates to the  
20 well-to-wheels analysis.

21 A The upstream benefit, at least in my view, is the  
22 benefit that occurs while making of the fuel.

23 Q So in the case of corn-based ethanol --

24 THE COURT: And of shipping the fuel to the  
25 location to which it's sold.

1           THE WITNESS: Yes. When we do the well-to-wheel  
2 analysis on ethanol, we include into it the farming that  
3 goes into planting the corn and fertilizing the corn,  
4 harvesting the corn, creating the -- the corn mash, taking  
5 it from a starch to an alcohol, and then delivering it to  
6 the station. That's all taken into account.

7           THE COURT: But at least, as far as I understand  
8 it, in regard to those charts which describe between 2011  
9 and 2016 essentially a flat -- I think Mr. Hemley used the  
10 word flat miles per gallon scale --

11          THE WITNESS: Yes.

12          THE COURT: -- you did not in any way consider the  
13 use or development of ethanol as -- as an alternative, at  
14 least in regard to those particular statistics?

15          THE WITNESS: For a couple of reasons, though.  
16 Number one, we didn't feel that we had an adequate way of  
17 being able to explain to the government that ethanol was  
18 actually used, and then maybe the more important reason is  
19 that E85 has a problem in the way it is certified in  
20 California, and we -- we are concerned about evaporative --  
21 passing the evaporative emissions test and passing the cold-  
22 start hydrocarbon test. Under those two conditions, we --  
23 we would not be able to certify the vehicle, and so,  
24 therefore, we would not be able to sell the vehicle into a  
25 California state.

1 BY MR. PAWA:

2 Q AB 1493 uses a well-to-wheels analysis for the CO2  
3 benefits of ethanol, correct?

4 A Yes, it does.

5 Q Mr. Weverstad, your testimony earlier today - correct  
6 me if I'm wrong - is that if GM pursues something like the  
7 max technology scenario, GM will be losing large quantities  
8 of money by complying with the AB 1493 regulations as best  
9 it can with widespread use of hybrid technology; is that  
10 right?

11 A That's the choice that we made in our max technology  
12 scenario.

13 Q GM currently sells several different hybrids, correct?

14 A Yes.

15 Q It has three different kinds of hybrid technology in  
16 the market; does it not?

17 A At the present time we have not -- the AHS II is not  
18 into production, available yet, but we do have different --  
19 what we call BAS and BAS+ technologies.

20 Q And the AHS II is coming out next year, correct?

21 A Yes.

22 Q In several different GM models?

23 A Yes.

24 Q What do you think is the fuel economy benefit of the  
25 AHS II hybrid system versus a conventional gasoline engine

1 in terms of the percentage improvement?

2 A We think it's much improved. I don't -- I don't have a  
3 specific number in mind, and if I did, I'm not sure I'd be  
4 allowed to tell you.

5 Q GM is currently selling the Saturn Vue Green Line in  
6 the 2007 model that's a hybrid, correct?

7 A Yes.

8 Q And that uses the belt alternator starter hybrid  
9 system, correct?

10 A Yes.

11 Q And that vehicle is selling very well; is it not?

12 A It -- it's in the -- in the market today, yes.

13 Q It stays on the dealer lots an average of about 13  
14 days; is that right?

15 A It's a rather limited production run, so I don't -- I  
16 assume you're correct. You wouldn't -- you wouldn't mislead  
17 me with your numbers.

18 Q It's not selling poorly, is it?

19 A Oh, no. No. It sells well.

20 Q In 2008 GM's going to be releasing the Saturn Vue Green  
21 Line front-wheel drive with a two-mode or AHS II hybrid  
22 system, correct?

23 A Calendar year? Model year? I think it's -- I think we  
24 may have those confused, but we are introducing the first  
25 front-wheel-drive AHS II in the Saturn Vue, yes.

1 Q I'm going to show you what's being marked as  
2 Defendant's Exhibit 2563.

3 This is a printout from GM's Web site entitled  
4 "Saturn Aura Green Line - The Lowest Priced Hybrid -  
5 Certified For \$1300 Tax Credit." Do you recognize this  
6 document?

7 A Yes. I believe you showed it to me during my  
8 deposition.

9 Q Do you have any reason to doubt it's a true and correct  
10 copy of a printout from GM's Web site?

11 A No, I do not.

12 MR. PAWA: We'd like to offer this exhibit into  
13 evidence, Your Honor.

14 THE COURT: Any objection to 2563?

15 MR. HEMLEY: No objection.

16 THE COURT: It is admitted.

17 (Defendant's Exhibit No. 2563 was received in  
18 evidence.)

19 BY MR. PAWA:

20 Q The second to last paragraph on the front page states,  
21 "In 2008 Saturn will offer the Vue Green Line with the first  
22 front-wheel-drive application of GM's new two-mode hybrid  
23 system that is expected to deliver up to a 45 percent  
24 improvement in combined city and highway fuel economy  
25 compared with the nonhybrid Vue." Do you see that?

1 A Yes.

2 Q That's a true statement; is it not?

3 A Yes. And the confusion that we had previously is, once  
4 again, that's in 2008, which is a 2009 model year.

5 Q So this 2008 refers to the calendar year 2008; is that  
6 correct?

7 A Yes.

8 Q The next sentence says, "A plug-in hybrid that has the  
9 potential to achieve double the fuel efficiency of any  
10 current SUV is also in development for the Vue." Is that  
11 true?

12 A It's under development, yes.

13 Q And it says in the next sentence, "This hybrid SUV will  
14 use a modified version of GM's two-mode hybrid system and  
15 plug-in technology," correct?

16 A Yes.

17 Q That's true?

18 A That's the plan.

19 Q Mr. Weverstad, as you sit here today, isn't it a fact  
20 that there is a great demand for more fuel-efficient  
21 vehicles in the United States marketplace generally?

22 A You forgot to read the next sentence in this press  
23 release. It said --

24 Q Well, your attorney, I'm sure, can ask you that on  
25 redirect if he'd like.

1           MR. HEMLEY: You can count on it. But you can do  
2 it now if you like.

3           THE COURT: It's cross-examination. It's up to  
4 you. So you want to go to another topic? That's fine. He  
5 can bring it up on redirect.

6           MR. PAWA: Well, there's a topic here about  
7 lithium ion batteries he wants to talk about, which we will  
8 get to.

9           THE COURT: Okay.

10 Q    Mr. Weverstad, as you sit here today, isn't it a fact  
11 that there is a great demand for more fuel-efficient  
12 vehicles generally in the United States marketplace?

13 A    Absolutely. There is -- with \$3 gasoline, there was a  
14 great demand. It kind of fell off. As prices are going up,  
15 it certainly is increasing demand.

16 Q    And GM boasts that it leads the industry with more  
17 vehicles than any other company that achieved 30 miles per  
18 gallon, correct?

19 A    Yes.

20 Q    Producing a fleet of vehicles compliant with AB 1493  
21 would help satisfy the demand for improved fuel economy  
22 across the nation; would it not, Mr. Weverstad?

23 A    If we could meet the AB 1493, that would certainly  
24 improve the fuel economy of all of our -- of vehicles and  
25 meet that demand, yes.

1 Q Do you recall testifying in your deposition about  
2 consumers can do math and that they won't spend a thousand  
3 dollars to get back \$500 in fuel economy?

4 A Yes.

5 Q I'm going to ask you to do some calculations with me.

6 A All right. Are they simple, or --

7 Q I have a calculator for you.

8 A Oh, great.

9 Q It's solar powered, you'll be glad to know.

10 THE COURT: Don't tell me engineers never learn  
11 math.

12 Q And we may be able to do this in your head, but if not,  
13 I want you to have that with you.

14 A We already have an answer on this one. When I pressed  
15 it on, it's got a number.

16 Q That's how you know I'm a lawyer. All right.

17 A Should I clear it?

18 Q Yes, please.

19 A Okay.

20 Q See if we can do this in your head. If not, you can  
21 use the calculator.

22 A All right.

23 Q The Saturn front-wheel drive that's not a hybrid that's  
24 on the market today gets a combined 24 miles per gallon,  
25 correct?



1 A Yes.

2 Q All right. And if you drive 15,000 miles per year,  
3 you're using 625 gallons of gasoline a year; is that  
4 correct?

5 A Yes.

6 Q And if gasoline is selling for \$3 a gallon, the fuel  
7 costs are \$1,875 for that nonhybrid vehicle operation for  
8 the year, correct?

9 A I'm going to -- I'm not even going to bother  
10 calculating. I'm going to assume you did correctly.

11 Q All right. If it sounds off, you request to use the  
12 calculator and we'll let you.

13 A Certainly.

14 Q All right. So if you switch to the hybrid that's  
15 coming out in 2008 that gets 45 percent better fuel economy,  
16 your savings are going to be \$844 a year, right? 45 percent  
17 of \$1,875?

18 A Oh. You're -- the savings in dollars. Yes.

19 Q Is that right?

20 A I'm counting on the your math skills, but you look to  
21 be capable of doing that math.

22 THE COURT: I thought it was 45 percent  
23 improvement over the current hybrid, which is not exactly  
24 the scenario that you talked about. Am I -- am I wrong? I  
25 thought that's what it said.

1           MR. PAWA: It says 45 percent improvement over a  
2 conventional.

3           THE WITNESS: Over the nonhybrid version.

4           MR. PAWA: If you look at the second to last  
5 paragraph, Your Honor.

6           THE COURT: Okay.

7 Q All right. So that's a fuel savings of \$844 a year?

8 A Yes.

9 Q Are GM vehicles built to last?

10 A Yes, they are.

11 Q Okay. So if it lasts five years, that's \$4,219 in fuel  
12 savings, correct?

13 A That's correct.

14 Q And if it lasts ten years, that's over \$8,400 in fuel  
15 savings, correct?

16 A It will last that long.

17 Q And that's -- does that sound like the correct fuel  
18 savings to you?

19 A I'm counting on your math skills, but I -- I'm trusting  
20 you here.

21 Q It doesn't sound wrong to you, does it?

22 A No.

23 Q You have no reason to dispute that?

24 A No, I do not.

25 Q And will a GM vehicle last 15 years?

- 1 A Yes, I believe it will.
- 2 Q Would you dispute that the fuel savings for owning that  
3 vehicle for 15 years would be over \$12,600?
- 4 A Yes. Another \$800. We're assuming \$3 every year.
- 5 Q And if it was \$2.50 a gallon, then we'd have to lower  
6 our savings by about 1/6th, correct?
- 7 A 2.50 divided by three, yeah.
- 8 Q All right. So instead of a 15-year savings of \$12,600,  
9 it might be something like \$10,600, correct?
- 10 A Okay.
- 11 Q No reason to dispute that, Mr. Weverstad?
- 12 A No. I'm trusting your math.
- 13 Q Mr. Weverstad, you agree that GM is competitive with  
14 Toyota from a technology standpoint on hybrids?
- 15 A Yes. They might quarrel with that, but I certainly  
16 believe we are.
- 17 Q Has GM been using hybrid technology to boost the  
18 horsepower of any of its vehicles?
- 19 A Boost the horsepower?
- 20 Q Well, let me ask it -- let me ask it to you this way.  
21 Is -- the Saturn Vue hybrid, does that vehicle have a higher  
22 horsepower than the nonhybrid?
- 23 A What happens is you can downsize the engine or you can  
24 add on the horsepower of the electric motor. So it depends  
25 on what you do.

1 Q Do you recall testifying in your deposition that the  
2 Saturn Vue hybrid had 27 horsepower -- was greater in  
3 horsepower by 27 than the nonhybrid Saturn Vue?

4 A Yes.

5 Q That was true, correct?

6 A Yes.

7 Q And all other things being equal, boosting the  
8 horsepower of an engine decreases the fuel economy, correct?

9 A In -- in the real world or on the test procedure, or  
10 what do you mean?

11 Q In the real world.

12 A Well, in the real world, horsepower -- a 27-horsepower  
13 increase may or may not change the overall fuel economy. It  
14 depends on how you drive.

15 Q Do you --

16 A The horsepower means that you have the ability to use  
17 more fuel and turn it into power; and by using more fuel,  
18 that would decrease fuel economy.

19 Q Do you recall testifying in your deposition that in  
20 general boosting the horsepower decreases fuel economy?

21 A All -- all -- everything else being equal, yes.

22 Q That was a true and correct answer; was it not?

23 A I think so.

24 Q We spoke a moment ago about the plug-in Saturn Vue  
25 that's in development.

1 A Yes.

2 Q Could you explain what a plug-in hybrid is to the  
3 Court, please.

4 A A plug-in hybrid is a hybrid that can get its battery  
5 charged off the grid or with a plug-in as well as from the  
6 engine using as an alternator or from regenerative braking.  
7 Like when you slow down, the energy that you lose, that,  
8 instead of heat, goes into the -- to recharge the battery.

9 Q I'd like to direct your attention back to the statement  
10 by Mr. Wagoner in front of Congress.

11 A Uh-oh. There it is.

12 Q And if you would look, please, at the fifth page of  
13 that document, which, by the way, does not have page numbers  
14 but does appear to have section numbers. And this is above  
15 Section No. 5 on the fifth page of the document.

16 A Okay.

17 Q The third paragraph on that page begins, "Over the last  
18 few months." Do you see that paragraph?

19 A Yes, I see that paragraph.

20 Q Could you please read the second sentence of that  
21 paragraph.

22 A "The benefits of electricity include the opportunity to  
23 diversify fuel sources upstream of the vehicle. In other  
24 words, the electricity that is used to drive the vehicle can  
25 be made from the best local fuel sources: Natural gas,

1 coal, nuclear, wind, hydroelectric, and so on."

2 Q That was a true statement; was it not?

3 A Yes.

4 Q And read, please, if you would, the last sentence of  
5 that -- I'm sorry, the second to last sentence of that  
6 paragraph beginning with the word "and."

7 A "And when the electricity itself is made from a  
8 renewable source, the entire energy pathway is effectively  
9 greenhouse gas emissions free."

10 Q That was a true statement; was it not, Mr. Weverstad?

11 A That's -- I'm trying to think of a possibility where  
12 you could generate electricity with a -- with a renewable  
13 source that has some greenhouse gases, but I'm not going to  
14 spend a lot of time thinking about that. I'll say yes.

15 Q You probably don't quarrel with Mr. Wagoner too much in  
16 your job, do you?

17 A It's not a great career move, that's for sure.  
18 Actually, he's very open to -- to hearing other ideas,  
19 but --

20 Q I'm going to show you what's been marked Defendant's  
21 Exhibit 2566.

22 A Are we finished with this one, or are we going to keep  
23 it open?

24 Q Finished with it temporarily.

25 This document is titled "Fuel Solutions. What If

1 You Could Commute to Work All Week Without Using a Drop of  
2 Gasoline?" It's a printout from GM's Web site. Do you  
3 recognize this to be a true and correct copy of a printout  
4 from GM's Web site.

5 A Quite honestly, I've never seen it before, but it's got  
6 our bow tie on it, so -- and it says it came from Chevy.com,  
7 so yes.

8 Q No reason to doubt that it's --

9 A No.

10 Q -- a genuine copy?

11 MR. PAWA: We move to have this exhibit entered  
12 into evidence, Your Honor.

13 THE COURT: Any objection? No objection?

14 MR. HEMLEY: I was responding to my colleague that  
15 I heard you ask if I have any, and I don't.

16 THE COURT: All right. So admitted.

17 (Defendant's Exhibit No. 2566 was received in  
18 evidence.)

19 MR. PAWA: I was having trouble hearing Your  
20 Honor. It's admitted?

21 THE COURT: Yes.

22 MR. PAWA: Thank you.

23 BY MR. PAWA:

24 Q You're familiar with the Chevy Volt vehicle described  
25 in this document?

- 1 A Yes, I am.
- 2 Q The Chevy Volt has a small three-cylinder engine that  
3 charges a battery, correct?
- 4 A That's what the concept is, yes.
- 5 Q It uses a new plug-in electric drive system that GM  
6 calls E-Flex, correct?
- 7 A That's -- once again, that's what our concept is, yes.
- 8 Q And this concept car on a 60-mile round trip would get  
9 150 miles to the gallon equivalent; is that correct?
- 10 A Theoretically.
- 11 Q And it would have a range of 640 miles; is that  
12 correct?
- 13 A Once again, theoretically.
- 14 Q And the cost to the consumer or vehicle owner of  
15 operating that vehicle would be about one-third the cost of  
16 gasoline if it were charged during off-peak hours, such as  
17 at night, correct?
- 18 A Once again, that's -- that's the plan. That's the  
19 concept that we're -- we're developing.
- 20 Q And you charge it by plugging it into an ordinary  
21 outlet; is that correct?
- 22 A That's one of the ways of charging it, yes.
- 23 Q It's true, is it not, that GM plans to bring the Volt  
24 to market in 2010?
- 25 A The -- 2010 is a very aggressive target for that



1 vehicle. I do not believe it will be in production in 2010.

2 Q Have GM executives and engineers been stating publicly  
3 that it likely will be brought to market in 2010?

4 THE COURT: Is this calendar year 2010 or model  
5 year we're talking about?

6 MR. PAWA: Model year.

7 Q Or calendar year is the question to you.

8 A The -- you're now seeing an example of what Mr. Kline  
9 said we didn't have, and that is we are very -- the people  
10 saying that are being very optimistic when they say that  
11 we'll have that vehicle ready in 2010. So we're not all  
12 pessimistic.

13 Q I'm going to show you what's been marked as Defendant's  
14 Exhibit 2567. This is a New York Times article dated  
15 January 7th, 2007, entitled "Detroit Auto Show; All the  
16 Technology Needed For 100 MPG, (Batteries Not Included)."  
17 Are you familiar with this article?

18 A No, I'm not.

19 Q Are you aware of the statement by Nick Zielinski, the  
20 Volt's chief engineer, on Page 2 in the fifth paragraph?

21 MR. HEMLEY: I'm going to object to this, Your  
22 Honor.

23 THE COURT: Well, it's hearsay. How do you  
24 proffer this, that this is admissible?

25 MR. PAWA: The Court's indulgence?

1 THE COURT: Yes.

2 (Pause in the proceedings.)

3 BY MR. PAWA:

4 Q Before we proceed with this document, let me ask you,  
5 Do you agree that there are GM officials stating publicly,  
6 Mr. Weverstad, that the Volt is expected to go to market in  
7 2010?

8 A I --

9 MR. HEMLEY: I would ask if that's a question  
10 that's independent of this document.

11 MR. PAWA: Yes.

12 THE COURT: Correct.

13 MR. HEMLEY: If that would be clear.

14 THE WITNESS: Okay.

15 MR. HEMLEY: So you don't have to look at the  
16 document.

17 THE WITNESS: I don't have to read the document?  
18 I'm not certain what our executives have said would be  
19 available.

20 Q Do you know whether or not the chief engineer for Volt  
21 is publicly expressing his position that the lithium ion  
22 battery will be ready in 2010?

23 A I -- I know Mr. Zielinski, and I've heard his private  
24 predictions.

25 Q I'm directing your attention back to Mr. Wagoner's

1 statement to Congress, and I'd like you to look at the  
2 bottom of Page 6.

3 A Page 6 or Number 6?

4 Q Right below Number 6.

5 A Okay.

6 Q Could you read the last paragraph on that page, please.

7 A The last paragraph says, "We are already working with a  
8 number of battery companies to develop the technology  
9 necessary to build a plug-in hybrid. The technological  
10 hurdles are real, but we believe they are surmountable."

11 Q Do you agree that they're surmountable, Mr. Weverstad?

12 A I am not familiar with the details of the lithium ion  
13 battery technology, but as -- as an optimistic engineer, I'm  
14 sure that they are surmountable.

15 Q Do you recall testifying without any qualification in  
16 your deposition that you agreed with that statement that the  
17 hurdles are surmountable?

18 A We didn't limit the amount of money that it might cost  
19 and the number of engineers it might take. As I said, it --  
20 they are surmountable.

21 Q Plug-in hybrids are excluded from your max technology  
22 scenario; are they not?

23 A Yes, they are.

24 Q Do you know whether or not there is a potential CO2  
25 advantage for plug-in hybrids relative to gasoline-powered

1 vehicles?

2 A Certainly it would be dependent upon where -- how the  
3 electricity was generated, but I think there would be an  
4 advantage.

5 Q Did you learn that information in the last few months?

6 A We've learned a lot in the last few months, yes.

7 Q Do you recall testifying as GM's corporate  
8 representative in September of 2006 that you did not know if  
9 there is a potential CO2 advantage for plug-in hybrids  
10 relative to gasoline-powered vehicles?

11 A I -- I don't recall saying that, but I would think -- I  
12 don't recall saying that.

13 Q I'm going to play it now to refresh your recollection.

14 MR. HEMLEY: Which deposition? Which page? Which  
15 line?

16 MR. PAWA: September 21, Page 173, Lines 8 through  
17 11.

18 MR. HEMLEY: Say that again, please, slower.

19 MR. PAWA: September 21, Pages -- Page 173, Lines  
20 8 through 11.

21 [Video clip of deposition of Alan Weverstad  
22 played as follows:

23 Q. Is there a potential carbon dioxide advantage for  
24 plug-in hybrids relative to gasoline-powered vehicles, if  
25 you know?

1 A. I don't know.]

2 BY MR. PAWA:

3 Q Your testimony today is that you do know and that there  
4 is an advantage?

5 A My testimony today is that plug-in hybrids offer the  
6 opportunity for an advantage.

7 Q Mr. Weverstad, you would agree that there's room for  
8 improvement in the greenhouse gas emissions and in the fuel  
9 economy of gasoline engines, correct?

10 A Yes.

11 Q Over 80 percent of the thermal energy of a gasoline  
12 engine is wasted; is that correct?

13 A 80 percent? I would say that -- I think -- I'm not  
14 sure it's 80 percent, but most of the -- most of the losses  
15 are heat, yes.

16 Q GM has not prepared for the purposes of this case or  
17 any other purpose an add technology scenario whereby it  
18 looks at the ability to comply with AB 1493 by adding  
19 technology to conventional gasoline engines, has it?

20 A We -- our max tech proposal includes adding the green  
21 and yellow, which we consider feasible technologies.

22 Q Are you familiar with the positions of the other  
23 manufacturer plaintiffs in this litigation?

24 A No, I am not.

25 Q Are you familiar with the position of DaimlerChrysler

1 in this litigation?

2 A Maybe I -- maybe I misspoke there. When you say  
3 "position," what do you mean by that?

4 Q Yeah. Let me clarify for you. Are you familiar with  
5 DaimlerChrysler's publicly stated descriptions of its  
6 scenarios for compliance?

7 A I -- no, I am not familiar with their compliance  
8 scenarios.

9 Q So you don't know whether or not Daimler has described,  
10 for example, in a pretrial brief in this case an add  
11 technology scenario?

12 MR. HEMLEY: Objection, Your Honor. He's not  
13 familiar with it.

14 THE COURT: Objection sustained. He just said he  
15 didn't know.

16 MR. PAWA: Yes, Your Honor.

17 Q Do you recall stating in your deposition that the life  
18 cycle of an engine, not an individual engine but an engine  
19 model, is about 20 years?

20 A Yes.

21 Q And do you recall stating that typically a regulatory  
22 change would drive internal changes to the engine?

23 A Yes.

24 Q And that was a true statement; was it not?

25 A Yes.

1 Q And you also stated that there's a whole myriad list of  
2 reasons why you would make changes to the engines, correct?

3 A Yes.

4 Q And that was a true statement?

5 A Yes.

6 MR. PAWA: The Court's indulgence.

7 THE COURT: Yes.

8 (Pause in the proceedings.)

9 MR. PAWA: Trying not to run afoul of HCI, Your  
10 Honor.

11 BY MR. PAWA:

12 Q You're familiar, Mr. Weverstad, with homogeneous charge  
13 compression ignition?

14 A I'm familiar with the terminology, yes.

15 Q HCCI?

16 A Yes.

17 Q As opposed to HCI, which is highly confidential  
18 information.

19 HCCI is a technology that holds the potential to  
20 greatly improve fuel economy; does it not?

21 A It has the potential of improving fuel economy, yes.

22 Q Do you know whether or not it's true that HCCI  
23 technology gets 80 percent of the fuel economy benefit of  
24 diesel at 50 percent of the cost?

25 A I'm not familiar with that.

1 Q Do you know whether or not GM has made public  
2 statements to that effect?

3 A I believe at my last deposition you showed me a  
4 document that -- that had those words on it, but I'm  
5 personally not familiar with that.

6 Q Do you have any reason to dispute that?

7 A I don't dispute that it was on your -- on your  
8 documents. There are other people following me in this  
9 action that will probably be better able to answer that  
10 question.

11 Q Do you know whether or not GM has tested HCCI  
12 technology?

13 A I think we've been evaluating it for several years.

14 Q You're familiar with stratified-charge, direct-  
15 injection technology, Mr. Weverstad?

16 A Familiar with the terminology, yes.

17 Q What is stratified-charge engine technology?

18 A It's a technique to -- to concentrate the charge so  
19 that you have better burning.

20 Q Has GM tested stratified-charge engine technologies?

21 A I'm sure we're evaluating that all the time.

22 Q I'm going to show you what's being marked as  
23 Defendant's Exhibit 2536. Before I do that, I want to make  
24 sure this is an acceptable redacted version. I said  
25 defendant's. This is Plaintiff's Exhibit 2536.



1 MR. HEMLEY: Defendant's.

2 MR. SCOVILLE: It is Defendant's Exhibit 2536.

3 This is an acceptable redacted version.

4 MR. PAWA: I stand corrected. This is Defendant's  
5 Exhibit 2536.

6 THE COURT: This redaction has been met with  
7 agreement?

8 MR. HEMLEY: Yes. There is a technical issue,  
9 however, because depending on what the questions are, it may  
10 not be fair to the witness to deprive him of a review of  
11 some of the -- he hasn't seen the redacted version, so I  
12 don't know where this is going, but if there's content that  
13 would be more complete, I guess we'll have to wait and see.

14 BY MR. PAWA:

15 Q Mr. Weverstad, are you familiar with this document?

16 A Not in this format, but certainly I am -- this is  
17 another document you showed me at my deposition.

18 Q I showed you the full copy at your deposition, correct?

19 A Yes. Yes, you did.

20 Q If you would turn, please, to Pages 5 and 6. Pages 5  
21 and 6 report GM's observations of other companies'  
22 statements regarding the fuel economy improvements from  
23 using stratified-charge technologies on gasoline engines,  
24 correct?

25 A Yes.

1 Q And they report improvements anywhere from 15 percent  
2 to over 35 -- to 35 percent, correct?

3 A I see the 15. Is 35 on the other page?

4 Q Yeah. It's on Page 5, third line from the bottom.

5 A Okay. Yes.

6 Q And these are actual vehicles on the market in Japan  
7 and Europe; are they not, Mr. Weverstad?

8 A Yes. I believe some of them are.

9 Q And GM tested a particular variant of stratified-  
10 charge, direct-injection technology and determined that the  
11 fuel economy improvement was between 15 and 20 percent; is  
12 that correct?

13 A Point me to the -- to the section and I won't take so  
14 long.

15 Q Well, it's been redacted out.

16 A Oh.

17 Q The actual numbers were redacted out pursuant to an  
18 agreement between counsel.

19 A So now what do I do?

20 Q Rely on your memory. Do you recall the answer?

21 A I recall seeing this -- this document, yes, I do.

22 Q And do you have any reason to dispute that one variant  
23 tested by GM of the stratified-charge, direct-injection  
24 technology obtained a 15 to 20 percent fuel economy  
25 improvement?

1 A I have no reason to doubt that.

2 Q And another variant of the technology obtained a fuel  
3 economy improvement --

4 MR. PAWA: The Court's indulgence?

5 THE COURT: Yes.

6 (Pause in the proceedings.)

7 BY MR. PAWA:

8 Q And do you recall that GM tested another version of  
9 stratified-charge technology that obtained a fuel economy  
10 improvement of somewhere between less than 12 and less than  
11 15 percent improvement?

12 THE COURT: Less than 12 and less than 15?

13 MR. HEMLEY: I think it's 14, isn't it, Matt?

14 THE COURT: I think less than 12 is less than 15.

15 MR. PAWA: That's what I thought, and I'm reading  
16 from an e-mail agreement between counsel. I'm trying very  
17 hard to abide by the agreement, Your Honor.

18 THE COURT: I appreciate that.

19 A Okay.

20 Q No reason to dispute that, do you, Mr. Weverstad?

21 A No. No. No.

22 Q Those are very substantial improvements in fuel  
23 economy; are they not, Mr. Weverstad?

24 A Yes, they are. Some of them are measured under  
25 different test cycles, but clearly improvement in fuel

1 economy.

2 Q Is there any insurmountable obstacle that you know of  
3 that would prevent bringing that technology to market in the  
4 United States?

5 A My -- my best recollection of this technology, and this  
6 was actually written in 2003, so it's -- so we've had some  
7 time to work on it, but my best recollection is it doesn't  
8 meet the tailpipe emission standards. Now, once again, I'm  
9 not the best person to ask about this particular technology.  
10 There will be others coming later that you can -- you can  
11 get a better answer from.

12 Q But as you sit here today testifying on behalf of GM,  
13 you know of no such insurmountable obstacle, do you,  
14 Mr. Weverstad?

15 A I know we've been working on swirl port heads since  
16 1984 and 1983 when I was at Pontiac. One year we'd put them  
17 in; the next year we'd take them out. So -- it's something  
18 we've been working on for a long time. I don't know the  
19 exact state of the art now, but we always ended up having an  
20 emissions problem.

21 Q And those vehicles are on the road in Europe and Japan;  
22 is that correct?

23 A With a different exhaust emission requirement, yes.  
24 Which is the number one criteria before we can sell a  
25 vehicle at any fuel economy, I need to make sure it passes

1 the emissions test for its full useful life.

2 Q By -- does direct-injection technology in general,  
3 putting aside stratified-charge, improve fuel economy,  
4 Mr. Weverstad?

5 A In general if it's done right, we think it improves  
6 fuel economy, yes.

7 Q Is it true that by the end of 2008 GM will produce as  
8 many as 200,000 vehicles globally with direct injection?

9 A I know that we are moving toward direct injection, yes.  
10 I don't know the exact numbers. I'm not doubting you. I'm  
11 sure there's a press release somewhere that you've -- you're  
12 quoting, so I'm not doubting you. I just don't personally  
13 know the numbers.

14 Q All right. Well, it doesn't sound wrong to you, then?

15 A No, it doesn't.

16 Q And does it also sound correct to you that by 2010 one  
17 out of every six GM vehicles in North America will have  
18 direct injection under your current business plan?

19 A Yes.

20 Q Are you able to say what the fuel economy benefit is on  
21 average of direct injection?

22 A I don't believe that -- that I'm allowed to say the  
23 exact benefit of that, no.

24 Q Is GM vigorously pursuing six-speed transmissions?

25 A Yes, we are.

1 Q Do you know what the fuel economy benefit is of six-  
2 speed transmissions?

3 A It's in our confidential business documents that you've  
4 seen.

5 MR. HEMLEY: Your Honor, I know -- I'm not going  
6 to interrupt, but I am. I know timing is an issue. We've  
7 been going about an hour and 50 minutes since the direct --  
8 since the cross started. As I mentioned at the bench, we  
9 are going to have a fair amount of redirect examination.

10 THE COURT: By "a fair amount," what are you  
11 suggesting?

12 MR. HEMLEY: Well, I would suggest that we'll  
13 probably have a minimum of a half an hour. I know there are  
14 other considerations, and -- but I'm making it clear I also  
15 think that the witness is going to need a break between the  
16 cross and the redirect. So I just offer that because I  
17 thought there was going to be some effort to keep this  
18 within a containable limit today.

19 THE COURT: How much longer do you anticipate your  
20 cross to last?

21 MR. PAWA: Approximately ten minutes.

22 THE COURT: Okay. Well, you know, I appreciate  
23 the fact that you're not going to be here tomorrow, and  
24 we're going to have a significant redirect. My question is  
25 whether or not it would be suitable at this point to break

1 and have -- I hate to have Mr. Weverstad come back again,  
2 but since it would not be this week, the climate changes  
3 here will be dramatic; that is, it will be spring when you  
4 come back, and my question is whether that would be a viable  
5 option for you in particular, Mr. Pawa.

6 MR. PAWA: The Court's indulgence?

7 THE COURT: Okay.

8 MR. HEMLEY: I would suggest, though, we would  
9 want the cross to finish and then -- actually, I have in  
10 mind two options. One is maybe more attractive. The notion  
11 of Mr. Weverstad coming back when Mr. Pawa is available is  
12 fine with us. Or if the defense prefers and someone else  
13 can take care of the redirect, that's fine with us, too.

14 MR. BOOKBINDER: Recross.

15 MR. HEMLEY: The recross. Excuse me. Normally we  
16 would object to that, but under the circumstances we would  
17 not.

18 THE COURT: Okay.

19 MR. PAWA: Your Honor, it would be acceptable to  
20 the defendants if I finished the cross tonight and redirect  
21 and recross happened tomorrow.

22 THE COURT: Okay. That's fine.

23 MR. PAWA: Thank you, Your Honor.

24 THE COURT: All right.

25 (A recess was taken at 4:35 p.m.)

1 TUESDAY, APRIL 10, 2007

2 (The following was held in open court at 4:45 p.m.)

3 THE COURT: Okay, Mr. Pawa? Appreciate the  
4 efforts on the court staff to finish up today.

5 MR. PAWA: Well, we appreciate it as well;  
6 very much, your Honor.

7 ALAN WEVERSTAD,  
8 having previously been sworn, was further examined  
9 and testified as follows:

10 CONTINUED CROSS EXAMINATION

11 BY MR. PAWA:

12 Q Mr. Weverstad, I am showing you what's being marked  
13 as Defendant's Exhibit 2571.

14 A Thank you.

15 Q This document is entitled Hydromatic Six-speed  
16 Automatic Delivered Performance and Economy for  
17 Full-sized SUVs and Performance Cars, and it appears to  
18 be a printout from GM's website. Do you recognize this  
19 to be a true copy of a printout from GM's website?

20 A Yes. This is another one that I think that you --  
21 you have shown me in the past.

22 Q And turning, if you would, please, to page two.

23 MR. PAWA: And, your Honor, we move to have  
24 this document admitted into evidence.

25 THE COURT: Any objection?



1 MR. HEMLEY: No objection.

2 THE COURT: So admitted.

3 (Defendant's Exhibit 2571 was received in  
4 evidence.)

5 MR. PAWA: Your Honor, I also may have  
6 forgotten to move one of the earlier ones, which was  
7 Mr. Wagoner's testimony, DX 2554.

8 THE COURT: Mr. Wagoner's testimony has been  
9 introduced. Okay.

10 There's a question whether you are going to  
11 introduce the whole thing or the small section of it.  
12 You were going to deal with that issue later, but now  
13 you have used it for content so that has been  
14 introduced.

15 (Defendant's Exhibit 2554 was received in  
16 evidence.)

17 MR. PAWA: Thank you, your Honor.

18 THE COURT: Go ahead.

19 BY MR. PAWA:

20 Q Directing your attention to page two, fifth  
21 paragraph, towards the end of that paragraph, you will  
22 see a reference to a four percent improved fuel economy.  
23 Do you know if that's a true and correct statement of  
24 the improvement in fuel economy from use of six-speed  
25 transmissions?

1 A Well, you know, I honestly -- I don't know. We  
2 should have actual data on that now, so we can -- we can  
3 certainly find that out for you, but -- it's certainly  
4 in the right range.

5 Q And does the fuel economy benefit vary greatly from  
6 one six-speed engine to another?

7 A Everything varies greatly from one vehicle to  
8 another, but if you are talking about is it in the right  
9 range, absolutely.

10 Q All right. Did you use that number in the max  
11 technology scenario, four percent?

12 A For all of those six-speed transmissions that we  
13 included in the analysis, yes.

14 Q You did? Mr. Weverstad, General Motors uses active  
15 fuel management on some of its engines today, correct?

16 A Yes, we do.

17 Q It's also known as displacement-on-demand, correct?

18 A Yes.

19 Q And is that a technology whereby some cylinders are  
20 shut down when they are not needed?

21 A Yes, we, at cruising speeds, we -- deactivate  
22 cylinders.

23 Q And does that improve the fuel economy of the  
24 vehicle?

25 A That's the desired goal, yes.

1 Q Can you state how much it improves the fuel economy  
2 of the vehicle?

3 A It varies. I don't recall the number off the top  
4 of my head.

5 Q How many different vehicles does GM have on the  
6 market today with displacement-on-demand?

7 A We have five -- three V8s and -- we have many V8s  
8 and I believe we've now introduced some V6 models.

9 Q Can you give a general range of the fuel economy  
10 improvement of that technology?

11 A I'm not sure that I am allowed to give the range,  
12 unless, you, have some public statement that we have  
13 made, and I can take a look at it and tell you if I  
14 think it's right.

15 Q Do you know if that's publicly available  
16 information?

17 A I honestly --

18 THE COURT: Is there any objection to  
19 approximations in this particular field? We have been  
20 dealing with approximations all along here. Is there  
21 any issue in regard to approximations of the fuel  
22 economy benefits?

23 MR. HEMLEY: Likely not, your Honor. But if  
24 you could just allow someone closer to that issue to  
25 take a moment, I would appreciate it.

1 (Brief pause.)

2 MR. HEMLEY: Maybe -- as I look at the  
3 transcript, I'm not exactly sure -- if we could have a  
4 precise restatement of the question because the  
5 statement that I am reading from the Live Note refers to  
6 improved technology -- fuel technology -- fuel economy  
7 from, quote, that technology. I am not quite exactly  
8 sure what the question is. And then I can get an  
9 answer.

10 THE COURT: Specifically, what are you asking  
11 for? You are asking -- you are asking for approximate  
12 improvements in fuel economy from what technology at  
13 this particular point?

14 MR. PAWA: It has two names: Active fuel  
15 management and displacement-on-demand. From that family  
16 of technologies.

17 THE WITNESS: And I am -- I can answer now?

18 THE COURT: As a general approximation, how in  
19 the world would that be --

20 MR. CLUBOK: A general approximation is  
21 probably fine, your Honor. If Mr. Pawa could just tell  
22 us what you need. What number, what range you are  
23 trying to get.

24 THE COURT: Mr. Clubok is going to testify.

25 MR. CLUBOK: Well, no, no, no.

1 MR. HEMLEY: Your Honor, I think --

2 MR. PAWA: I think they want me to testify but  
3 I won't.

4 MR. CLUBOK: Your Honor, what we have done  
5 with every other instance of this is we basically said  
6 to the defendants, What do you need? Do you need at  
7 least six? Do you need at least seven? Whatever point  
8 you are trying to make, tell us that, and if it's within  
9 a range, if it's approximate, we will agree to it. So,  
10 we really bent over backwards to try to accommodate  
11 whatever point they are trying to make with these  
12 numbers, and so, I am just trying to cut through this.

13 THE COURT: How about on cross examination --  
14 since it's cross examination, he can ask a leading  
15 question, and you can ask him approximately what you  
16 think the benefits might be in regard to fuel economy  
17 standards, and if you put it in the question itself, he  
18 probably would agree.

19 MR. CLUBOK: Your Honor, we just agreed to the  
20 range.

21 THE COURT: What is that?

22 MR. CLUBOK: We agreed to a range that is an  
23 approximation, and Mr. Weverstad can answer that  
24 question.

25 MR. PAWA: And, your Honor, the reason I have

1       been trying to avoid leading questions that may touch on  
2       HCI is that it's out of my mouth at that point.

3               THE COURT: I appreciate it, but now you have  
4       got an approximation that you have agreed upon with the  
5       other side. Can you ask the question and we can move  
6       on.

7               MR. PAWA: Yes.

8       BY MR. PAWA:

9       Q       Approximately five to seven percent, does that  
10      sound like a correct figure?

11     A       Yes.

12              THE COURT: That wasn't so hard, was it?

13              THE WITNESS: I was going to say under 10, so  
14      I was going to give you something.

15     Q       Would you agree it's under 10?

16     A       Yes, I -- last time I looked, five and seven are  
17      less than 10.

18     Q       GM has a proprietary fuel cell stack that it's  
19      working on; is that true?

20     A       That's correct.

21     Q       Can you say when that will be ready?

22     A       We have -- I think we have publicly indicated that  
23      our plan is that it will be ready prior to 2012. Ready  
24      from a standpoint of, it would -- our engineering  
25      program would be over, not -- it wouldn't be into

1 manufacturing, if that's what you mean by ready.

2 So, what ready did you want?

3 Q Well, do you recall testifying in your deposition  
4 that it would be ready around 2011, 2012?

5 A And I was speaking of from an engineering  
6 standpoint, not a production standpoint.

7 Q I would like to direct your attention, again, to  
8 Plaintiff's Exhibit 903 which would be in that notebook  
9 that Mr. Hemley gave you.

10 A 903. Is that one of our slides?

11 Q It looks like this. It's the graph of the LTD2s?

12 A Yes, I have that. And in fact, it was right on  
13 top.

14 Q And, my question for you is, how can we reconcile  
15 that flat blue line for GM's fuel economy from 2011  
16 through 2016 with the fact that fuel economy standards  
17 from the federal government will be increasing from now  
18 through 2011?

19 A The way you reconcile that, or at least the way we  
20 were thinking of this, when we developed this, is there  
21 could be many small incremental improvements over time  
22 along that line. But if I were to put them down, then I  
23 would be guaranteeing that that's what changes would be  
24 made, and I'm -- we haven't done that because we don't  
25 know what's going to happen between -- after 2011 and --

1 Q Isn't it --

2 A -- 2012.

3 Q Isn't it customary to have a trend line continue  
4 over the same trajectory?

5 A That would be a -- actually, I am not sure that's  
6 the case. Sometimes that makes sense, sometimes it  
7 doesn't. In this particular case, we took, at the last  
8 point we knew for sure, and drew a straight line. Now,  
9 we didn't hide the fact that that's what we did. So, we  
10 feel that that's the most fair way. If I were to draw a  
11 line somewhere slightly higher than that and say that's  
12 what I expect, then I'm negotiating with myself.

13 THE COURT: So as I understand it, you went to  
14 the year 2011 or 2012, and from that point, you figure  
15 out a figure, what the fuel economy standard would be.  
16 Now there may be some flexibility coming down the road,  
17 there may be new technologies, there may be CAFE  
18 standards that you have to react to, there may be  
19 improvements or not, but as a result, you felt that it  
20 was unwise to adjust that line in any particular way, so  
21 that you could -- basically took the 2011 or 12 figure  
22 and left it flat, knowing that it was a flexible figure,  
23 and could be increased?

24 THE WITNESS: You're exactly right. And for  
25 me to --



1           THE COURT: That correspondingly means that  
2           the numbers that you came up with -- for instance, in  
3           2016, you came up with seven miles per gallon -- sure,  
4           10 miles per gallon shortfall on the LTD -- DT-1, that's  
5           a flexible figure because, quite frankly, by 2016, that  
6           underlying flat line may in fact be bumpy.

7           THE WITNESS: Yes.

8           THE COURT: Or you may have increased as a  
9           result of technologies. So that is -- that's  
10          essentially a flexible number. It is not cast in stone.  
11          It may or may not be accurate. Is that -- I mean,  
12          that's how I have heard what you said.

13          THE WITNESS: And you have heard it exactly  
14          right. The difference is, we don't anticipate a large  
15          increase in that, but for us to predict any increase in  
16          that, or no increase on that, we chose no increase  
17          because that's what we know. Anything else would have  
18          been a guess.

19          THE COURT: And the question that I have, in  
20          getting down to the basics of what you testified to,  
21          when you are talking about the decreasing line -- if you  
22          go to the second scenario, you are talking about the  
23          vehicle reduction part of the scenario. When you start  
24          having the line go down to 2016, in which there no  
25          longer will be cars sold in the state of Vermont, and

1       theoretically, in response to my question, you said New  
2       York or California as well, whether that is based upon  
3       those miles per gallon shortfalls, in which case if you  
4       have increased technology, improvements to fuel economy,  
5       then that downslide to no vehicles, in any of these  
6       states, is also variable, based upon what happens in the  
7       future.

8                   THE WITNESS:  And how we perform in the  
9       future.  Yes.

10                  THE COURT:  So it is -- we are not talking  
11       figures here in 2016 or, for that matter, any time after  
12       2011 that are cast in stone.  But they're best  
13       estimates; is that correct?

14                  THE WITNESS:  Well, what -- what we're  
15       comparing though is, when we looked at the numbers for  
16       model elimination, we were looking at the cast-in-stone  
17       numbers from the Vermont regulation and from the  
18       California regulation.  What we -- what we're talking  
19       about here is what the federal government might do, what  
20       kind of incremental changes they might make.

21                  THE COURT:  Well, actually that's not  
22       exactly -- well, I don't want to get into a debate with  
23       you since I am asking you the question.  But when you  
24       talk about the flat line you are using as variables, the  
25       change in federal CAFE standards as one variable, but

1       you are also looking at the possibility of other  
2       technologies which, quite frankly, Mr. Pawa is going  
3       over. And that might impact, you know, in your view, to  
4       a lesser extent, but to some extent, the figures that  
5       you are talking about, and in regard to reduction of  
6       vehicles, the frequency of reduction, the amount of  
7       reduction of vehicles within a jurisdiction.

8               THE WITNESS: Yes. The size of the bar, yes.

9               THE COURT: The size of the bar. Basically  
10       what you are saying is they're basically variable, I  
11       thought.

12              THE WITNESS: Yes.

13              THE COURT: And you tell me if I'm wrong.

14              THE WITNESS: No. No, I think you are exactly  
15       right.

16              THE COURT: Okay. All right, I think I have  
17       got it. Okay.

18       BY MR. PAWA:

19       Q       Take a look please, if you would, in that same  
20       notebook at Plaintiff's Exhibit 906.

21       A       Which one is that?

22       Q       It looks like this. It says GM Maximum Technology  
23       Scenario LDT2/MDPV. Slide 21, if that helps.

24       A       Yes, that would. Thank you.

25       Q       Sure.

1 A Yes.

2 Q All the way out through 2016, using the max  
3 technology scenario, is it correct to understand this  
4 exhibit that GM is either in compliance or is within 0.8  
5 miles per gallon of being in compliance if it pursues  
6 the max technology scenario for LDT2/MDPV?

7 A Well, I would argue that eight tenths of a mile per  
8 gallon shortfall is not significant, but the point is,  
9 under the max technology scenario, at a cost of greater  
10 than \$15 billion, that's how close we can come.

11 Q That's pretty darned close, correct?

12 A As I said, I would quarrel with point eight is  
13 pretty darned close, but that's how close we came.

14 Q And when you say you are going to lose \$15 billion,  
15 is that based on some real-world economics of today of  
16 the vehicle market?

17 A It's based on our calculation of what the  
18 additional cost for the hardware and the cost of the  
19 tooling, over a -- averaged over a five-year period,  
20 versus what we could earn, you know, what we could sell  
21 it for. So we get -- we take that into account, the  
22 increase in price, and we also took into account the  
23 changes we anticipate for -- under the CAFE  
24 requirements.

25 Q How do you know what you can sell a vehicle for at

1 2014?

2 A We know what we can sell it for today, so we -- we  
3 assume that the same kinds of numbers that -- as we did  
4 for today.

5 Q You didn't take into account the fact that in 2014,  
6 if this lawsuit fails, all fuel economy standards will  
7 be in compliance and that will change the economics of  
8 the vehicle market, would it not?

9 A I do not believe we took into account what you are  
10 talking about there, no.

11 Q Do you know whether or not GM has pledged to reduce  
12 the CO2 emissions from its factories by 40 percent?

13 A We have -- we have agreed to reduce our -- we have  
14 a goal to reduce the CO2 from our factories. I don't  
15 know about the 40 percent, but I am assuming that you  
16 have a document there that says that, so that's fine.

17 Q All right. Thank you. And what's the reason for  
18 GM doing that, do you know?

19 A There are several reasons. One of the real  
20 advantages is that saving energy saves money so  
21 there's -- that's one plus; reason. Any waste that you  
22 can save is something that we want to do.

23 Q Any other reasons?

24 A Clearly we want to be good citizens and contribute  
25 to reduced energy waste.

1 Q Have anything to do with global warming?

2 MR. HEMLEY: Your Honor, I think I will  
3 interpose an objection here. The operation of their  
4 factory seems far afield from the issues that are in  
5 this trial. I didn't think this was an issue. In fact,  
6 I recall discussions about it not being an issue, but in  
7 any event --

8 THE COURT: Well, you are linking this up  
9 to -- from the well-to-wheel factors in some particular  
10 way? In which case I am not so sure this witness would  
11 be the expert who would be testifying about that.

12 MR. PAWA: I will withdraw the question, your  
13 Honor.

14 MR. HEMLEY: All right.

15 BY MR. PAWA:

16 Q Mr. Weverstad, you would agree that GM has an  
17 extraordinary ability to innovate technologically,  
18 correct?

19 A We are very proud of our abilities, yes.

20 Q And you remember testifying in your deposition,  
21 "We're as good as anybody." Do you remember that?

22 A I would say that again.

23 Q It's true, isn't it?

24 A We think so.

25 Q GM is as good as anyone else, isn't it?

1 A We think so.

2 Q As good as any other automobile manufacturer,  
3 correct?

4 A Yes.

5 Q And you think, do you not, that on a  
6 segment-by-segment basis, you're competitive with  
7 Toyota, correct?

8 A We're -- we believe on a segment-by-segment basis  
9 we are competitive with all the manufacturers.

10 MR. PAWA: The Court's indulgence?

11 THE COURT: Yes.

12 (Brief pause.)

13 MR. PAWA: Last document, your Honor. Last  
14 couple of questions.

15 Q I am going to show you what's being marked  
16 Defendant's 2572.

17 A Thank you.

18 Q This document is entitled GM Offers Gas Price  
19 Protection to Consumers in Florida and California. It's  
20 a GM press release dated May 23rd, 2006. Do you  
21 recognize this document, Mr. Weverstad?

22 A Yes, I believe it's one that you showed me at the  
23 past deposition.

24 Q No reason to dispute that it's a genuine copy of a  
25 GM press release?

1 A No.

2 MR. PAWA: Move to admit it into evidence,  
3 your Honor.

4 THE COURT: Any objection?

5 MR. HEMLEY: No, no objection.

6 THE COURT: So admitted.

7 (Defendant's Exhibit 2572 was received in  
8 evidence.)

9 Q Do you know whether it's true, Mr. Weverstad, as  
10 described in this document, that GM has been offering  
11 gas price protection in 2006 and 2007 to consumers in  
12 Florida and California?

13 A I don't know that we offered gas protection in 2006  
14 and 2007. I think we offered it for some 2006 and some  
15 2007 vehicles.

16 Q And could you describe what that program is,  
17 please?

18 A Well, as I -- I said in my deposition, I wasn't  
19 particularly familiar with this, so if you want me to  
20 read through here, I'll tell you, but I'll give you my  
21 view of reading this.

22 THE COURT: Well --

23 MR. HEMLEY: The document's in evidence.

24 THE COURT: The document is in evidence.

25 MR. PAWA: That's fine. I will move on.



1 THE COURT: Okay.

2 Q Mr. Weverstad.

3 A Yes.

4 Q To summarize, the maximum technology scenario does  
5 not include -- does not include any clean diesel,  
6 correct? In terms of a large increase to --

7 A No, it does not.

8 Q -- to try to comply with AB 1493?

9 A We chose the hybrid instead.

10 Q And zero for ethanol in the max technology  
11 scenario, correct?

12 A We did not believe we would be able to get credit.

13 Q That's a yes?

14 A We did not include it because we don't know that  
15 we can meet the emissions standards.

16 Q And zero for hybrids? In the max technology  
17 scenario? I'm sorry, plug-in hybrids?

18 A Zero for plug-in hybrids.

19 Q And zero for HCCI technology?

20 A Zero for HCCI.

21 Q And zero for stratified charged direct injection,  
22 correct?

23 A There are none included.

24 MR. PAWA: No further questions, your Honor.

25 Thank you very, very much for your patience today, and

1       thank you to the witness and to plaintiffs' counsel.

2                   THE COURT: Well, bon voyage for your family  
3       vacation.

4                   THE WITNESS: You know, they forgot to offer,  
5       I'd go with you and you can do it there. Wherever you  
6       are going, it's gotta be better.

7                   THE COURT: All right. I ask that you be back  
8       at 8:15 tomorrow morning. The parties understood that  
9       someone else will be able to do the cross examination  
10      from the --

11                  MR. WYNN: Yes, your Honor, if we could on  
12      that question for a moment?

13                  THE COURT: Sure.

14                  MR. WYNN: Australians like to get the first  
15      word and maybe even the last.

16                  Your Honor, looks like I am going to be responsible  
17      for any recross that there would be. Considering that  
18      the court staff and your Honor, and everyone else has  
19      been so giving of their time today, and considering that  
20      your Honor obviously has the idea of getting the 40  
21      hours in, and we've done many of those 40 hours today, I  
22      wondered if we could not agree to start at, say, nine  
23      o'clock tomorrow morning? Particularly because we would  
24      expect to get demonstrative exhibits today as late as  
25      seven o'clock, and there's going to be very little time

1 to review those for the following witnesses in chief  
2 that will follow after Mr. Weverstad is finished.

3 THE COURT: Okay. Well, are you going to be  
4 doing the next witnesses?

5 MR. WYNN: No, not me, but presume that  
6 counsel will be here to hear the rest of Mr. Weverstad,  
7 and there won't be much time to review those. But  
8 really, the point, your Honor, is that a slight later  
9 start I don't think would have any problems, and  
10 frankly, it would give me a time to read the transcript  
11 if I am going to have to do the redirect -- recross.

12 THE COURT: Okay, Mr. Hemley?

13 MR. HEMLEY: I don't want to be the grinch  
14 here, your Honor. I am definitely not Australian. But,  
15 in any event, we very much oppose that, and Mr. Wynn did  
16 approach me in advance to tell me he was going to make  
17 this application.

18 Our witnesses have been scheduled for a long time.  
19 Many of them have transportation needs to meet. We  
20 tried to accommodate -- remember the extension of this  
21 day was an accommodation that we made, and we'd like to  
22 start at 8:15 and get back on schedule as soon as  
23 we can.

24 THE COURT: I really think it's important to  
25 stay on schedule at this point because we are doing this

1 concentrated time period, and, you know, even though  
2 there's a couple of extra hours put in at this point, it  
3 is fairly close, all the way down the road, so, skip  
4 dinner.

5 MR. WYNN: I have gotten used to that, your  
6 Honor.

7 THE COURT: All right. We will start at 8:15  
8 tomorrow.

9 (Court was in recess at 5:13 p.m.)

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14 C E R T I F I C A T I O N

15 I certify that the foregoing is a correct  
16 transcript from the record of proceedings in the  
above-entitled matter.

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\_\_\_\_\_  
Date

\_\_\_\_\_  
Anne E. Nichols

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