

Deposition Testimony of:

Mark Sogge

Date: September 18, 2012

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Page 13:01 to 13:01

00013:01 (Exhibit No. 8801 marked.)

Page 13:04 to 13:19

00013:04 Today is September 18th, 2012. This is
05 the deposition of Mark Sogge regarding the oil
06 spill of the oil rig DEEPWATER HORIZON on April
07 20th, 2010. The time is 8:36 a.m. We're on the
08 record, beginning Tape 1.
09 MARK KENNETH SOGGE
10 was called as a witness by BP, Inc., and, being
11 first duly sworn, testified as follows:
12 DIRECT EXAMINATION
13 QUESTIONS BY MR. ROMAN:
14 Q. Good morning, Mr. Sogge. How are you?
15 A. Good morning. I'm well.
16 Q. Could you please state your work address?
17 A. My official work address is U.S.
18 Geological Survey, 2255 Gemini Drive, Flagstaff,
19 Arizona.

Page 14:08 to 14:14

00014:08 Q. And you understand that you have been
09 designated as a Rule 30(b)(6) witness in this
10 case?
11 A. Yes.
12 Q. And you understand that you're also
13 testifying in your individual capacity?
14 A. Right.

Page 14:18 to 14:20

00014:18 Q. In 2010 and 2011, you served as Deputy to
19 Marcia McNutt, who is the Leader of the Flow Rate
20 Technical Group. Is that correct?

Page 14:22 to 22:06

00014:22 A. During that period, for -- for parts of
23 that, I served as a -- a Deputy to Doctor -- yes.
24 Q. (By Mr. Roman) And is it okay if I refer
25 to the Flow Rate Technical Group as the FRTG?
00015:01 A. Certainly.
02 Q. You were appointed at the end of May of
03 2010?
04 A. Yes. I was asked, I believe, in -- in
05 the second or third week to -- to take on that
06 responsibility.
07 Q. Until when did you serve?
08 A. I think in terms of any official

09 capacity, until the completion of the Flow Rate
10 Technical Group's Final Report on March 10th, I
11 believe it was, 2011.

12 Q. And you served as Ms. McNutt's Deputy
13 this entire time?

14 A. Not in a full-time capacity. Once the
15 spill was capped and we left Houston, then I was
16 doing it on an intermittent basis, shepherding
17 the Report through to completion.

18 Q. Did you ever ta -- take -- well, strike
19 that.

20 At the time you were appointed to serve
21 as Ms. McNutt's Deputy, you were the Chief of
22 Staff for the Western Regional Director of the
23 U.S. Geological Survey?

24 A. I -- that was right during a transition
25 point from one job to another, so from a
00016:01 technical standpoint, I'm not sure if I was still
02 literally in that Chief of Staff role. I was in
03 the process of moving over to a -- a different
04 position.

05 Q. What was that different position?

06 A. It would have been as a Senior Science
07 Advisor to the Regional Executive for the Pacific
08 Southwest, a very similar position to being Chief
09 of Staff, but a different part.

10 Q. Is that your current position?

11 A. I'm now Associate Regional Executive for
12 the Pacific Southwest Area.

13 Q. Okay. Did you ever take a -- well,
14 you -- when did you start with U.S. Geological
15 Survey?

16 A. Well, let's see. I -- I believe that we
17 were transitioned from -- I wa -- I was part of
18 that group of Scientists who worked in the
19 Department of Interior in the National Parks
20 Service, then transitioned, due to a
21 secretarial decis -- Secretary of the Interior
22 decision, over to USGS. And I believe that would
23 have been about 1996, or it may have not formally
24 occurred until about 1998.

25 Q. And were you with the USGS continuously
00017:01 from 1996, 1997, 1998, until the present?

02 A. Yes.

03 Q. Okay. Did you have to take a leave of
04 absence from your position at the USGS to serve
05 as Ms. McNutt's Deputy on the FRTG?

06 A. No. That -- that was done in my capacity
07 as a USGS Scientist, or employee, I should say,
08 at that time.

09 Q. Let me hand you what has been marked as
10 Exhibit 8801, which is Tab 1 in everybody's book.
11 I ask if you've seen this document before.

12 A. Yes, I have.

13 Q. What is it?

14 A. This is what's considered a USGS
15 Professional Page. It's a place where a USGS
16 employee can upload information about their work
17 and -- and their background.

18 Q. Did you prepare this exhibit?

19 A. Yes, I did.

20 Q. Did you -- when did you prepare it?

21 A. When did I prepare --

22 Q. Well --

23 A. -- this version, or when did I first do
24 it?

25 Q. I -- I -- well -- so this is something
00018:01 that you continuously updated?

02 A. Yeah, periodically updated.

03 Q. And is this the current version?

04 A. I wouldn't be able to tell you that
05 without looking. I believe it may be, based on
06 the data I see.

07 Q. We -- we printed it out on August 29th of
08 this year.

09 A. Then, yes, that would be the current
10 version.

11 Q. Okay. And does this accurately set forth
12 and fairly summarize your academic background and
13 professional experience?

14 A. Let me take a moment to look at this.
15 (Reviewing document.) It accurately reflects
16 my -- my educational background. It does not
17 look like my most recent series of positions
18 within USGS are here. I notice that this stops
19 at my Western Regional Office position, and I've
20 had several positions since then.

21 Q. Okay. Can you just briefly -- I -- I
22 know you said some -- said at the outset what
23 those were, but to the best of your ability, the
24 precise title and the -- as -- as best as you
25 can, the time period that you held those
00019:01 subsequent positions.

02 A. Right. Well, I believe that it was -- I
03 was Chief of Staff, I believe, until some point
04 in 2010, at which time they reorganized USGS and
05 eliminated the Regional Office positions. So I
06 transitioned then to the Senior Science Advisor
07 for the Pacific Southwest area. And that was --
08 that basically evolved into the Associate
09 Regional Executive position. I've been in that
10 position since then.

11 Q. Okay. And what are your responsibilities
12 in those latter two positions?

13 A. With the --

14 Q. What were your responsibilities in the --
15 in the second-to-the-last position, what are your
16 current responsibilities?

17 A. In -- excuse me, I'm -- I have the tail
18 end of a cold, so I apologize for my coughing.

19 The position as Senior Science Advisor
20 was a very short bridge position between my
21 Regional role and my current Area role. And in
22 that case, I was a -- I guess, a liaison or a
23 point person for some of the science issues, USGS
24 science issues in the Southwest, such as the
25 border issues, Grand Canyon, and the Colorado
00020:01 River science, things such as that.

02 In my Associate Regional Executive role,
03 I -- actually I have formal supervision of the
04 Center Directors for five USGS Science Centers
05 and still continue to deal with some broad-scale
06 science issues.

07 Q. Okay. Directing your attention to the
08 second page of Exhibit 8801, I believe you said
09 that the se -- where you -- at the -- where it
10 says "EDUCATION." Do you see that?

11 A. I do.

12 Q. Do you have any other degrees or academic
13 training other than what's set forth on Page 2
14 here?

15 A. No, nothing that would be considered an
16 academic degree.

17 Q. Okay. Then starting at the bottom of
18 Page 2 and continuing through Page 11 is a
19 listing of "PRIMARY LITERATURE PUBLICATIONS." Do
20 you see that?

21 A. I do.

22 Q. Is it fair to say that you have, over the
23 course of your career, published scores of
24 articles and other writings?

25 A. I believe my -- yeah. I believe I've
00021:01 published 50 or -- or more scientific papers and
02 hundreds of Agency Reports.

03 Q. Is it fair to say that all or nearly all
04 of these articles have related to threatened and
05 endangered birds and many specifically to the
06 Southwestern Willow Flycatcher and Yellow-billed
07 Cuckoo?

08 A. En -- en -- rare and endangered birds or
09 endemic subspecies are where most of my
10 publications are, yes.

11 Q. Directing your attention to Pages 1 and
12 2, where it says employment background --

13 A. I'm sorry. I don't --

14 Q. Where it says "RESEARCH AND LEADERSHIP
15 EXPERIENCE" --

16 A. Ah.

17 Q. -- which, I --

18 A. Yes.

19 Q. -- guess, is your employment
20 background -- other than as you've amended it
21 this morning, is this a fair and accurate summary
22 of your employment history, starting with your --
23 yeah, after you received your Master's in 1988?

24 A. Yes.
25 Q. And is it fair to say that your career,
00022:01 at least through 2008, focused primarily on
02 matters relating to threatened and endangered
03 birds?
04 A. Yeah. I -- I think that would be a fair
05 characterization, yeah.
06 Q. Okay.

Page 22:09 to 22:09

00022:09 (Exhibit No. 8802 marked.)

Page 22:12 to 24:11

00022:12 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
13 what's been marked as Exhibit 8802, which is
14 Tab 2 in everyone's notebook. Have you seen this
15 document before?
16 A. Yes, I have.
17 Q. This is a memo dated June 2nd of 2010,
18 from Marcia McNutt, announcing your appointment
19 to serve as her Deputy as Leader of the Flow Rate
20 Technical Group, correct?
21 A. Correct. I'm -- I'm sorry. Excuse me.
22 As the Leader of the Flow Rate Technical Group?
23 Q. Well, you -- serving -- she was the
24 Leader, and you were the Deputy, correct?
25 A. Correct, yes.
00023:01 Q. Okay. Had you worked with Ms. McNutt
02 before being appointed to serve as her De --
03 Deputy?
04 A. No, I had not.
05 Q. Was McNutt the one -- Ms. McNutt the one
06 who asked you to serve as her Deputy?
07 A. The actual request came from Dr. McNutt's
08 Deputy, Dr. Suzette Kimball.
09 Q. Do you know why you were selected?
10 A. My best understanding is that I have
11 experience in working on temporary assignments
12 elsewhere. I'd worked on a variety of them over
13 the last -- over the two previous years. And I
14 think my -- the focus for me, at least in terms
15 of the expertise they were looking for, was
16 someone who can work with people, Science
17 management, you know, working with teams of
18 Scientists and things.
19 Q. Now, those -- those other matters on
20 which you had worked didn't involve oil spills or
21 oil wells or anything of this --
22 A. Not at all.
23 Q. -- type here?
24 Now, the FRTG was chartered on May 19th
25 of 2010 by the National Incident Command. Is

00024:01 that correct?

02 MR. BENSON: Object to the form.

03 A. The Flow Rate Technical Group was
04 chartered, I believe, by the Interagency
05 Solutions Group, which was a component of the
06 National Incident Command.

07 Q. (By Mr. Roman) And was that on or about
08 May 19th of 2010?

09 A. On May 19th was -- that was the date at
10 which the Charter was adopted by the Interagency
11 Solutions Group, yes.

Page 25:05 to 27:01

00025:05 Q. (By Mr. Roman) Is it fair to say that the
06 FRT was established by the National Incident
07 Command specifically to take the lead on behalf
08 of the Government on flow rate issues arising out
09 of the DEEPWATER HORIZON incident?

10 A. The Charter for the Flow Rate Technical
11 Group was to come up with an initial estimate as
12 quickly as possible of the flow rate and then to,
13 hopefully within several months, have an updated
14 peer-reviewed estimate. I wouldn't characterize
15 it as being responsible for all aspects of flow
16 relation -- or flow issues for the National
17 Incident Command.

18 Q. Well, what other Government entity other
19 than the FRTG was looking into flow rate issues?

20 A. The Department of Energy had a Team that
21 was working on flow rate issues.

22 Q. And did the FRTG work with the Department
23 of Energy in developing flow rate estimates?

24 A. The Flow Rate Technical Group Teams and
25 Subteams worked independently to develop their
00026:01 estimates. Later in the -- later in the spill
02 response, they compared -- they compared
03 information and such. But I guess I
04 should clarify, I -- if I might, because this may
05 come up later, Department of Energy is a large
06 organization, and there was one Department of
07 Energy Tri-Lab, what we called the Tri-Labs Team,
08 that was doing flow rate estimates independent of
09 the Flow Rate Technical Group. The Flow Rate
10 Technical Group Subteams also included, in some
11 cases, DOE employees. So I just want to make
12 sure that's -- when speaking about DOE, there's
13 two ways in which they were engaged.

14 Q. Do you know whether the DOE ever
15 announced its own flow rate estimates?

16 A. Announced in -- in what way?

17 Q. Well, I mean, we'll -- we'll see these
18 exhibits later, but -- but the FRTG had Press
19 Releases and --

20 A. Right.

21 Q. -- Reports in which it announced flow
22 rate estimates, correct?

23 A. Right.

24 Q. Do you know if the Department of Energy
25 ever did that?

00027:01 A. I'm not aware of any.

Page 27:09 to 27:15

00027:09 Q. (By Mr. Roman) And so when the
10 Government -- when the U.S. Government announced
11 its flow rate estimates, it was through the FRTG,
12 correct?

13 A. When -- when the National Incident
14 Command announced flow rate estimates, it was
15 through the Flow Rate Technical Group.

Page 28:17 to 28:19

00028:17 Q. (By Mr. Roman) Well, so the FRTG was to
18 be the one voice announcing flow rate estimates,
19 correct?

Page 28:21 to 28:21

00028:21 A. In -- in -- I would say that the --

Page 28:23 to 28:24

00028:23 A. -- Flow Rate Technical Group was not
24 necessarily --

Page 29:04 to 31:21

00029:04 A. I gu -- I guess I -- I would say -- I
05 think I -- I've probably given the best answer I
06 can, which is I don't recall seeing anything
07 directed in that language.

08 Q. (By Mr. Roman) Now, you started with the
09 FRTG at the end of May. I think it was around
10 May 30th. Does that sound right?

11 A. I believe -- I believe so.

12 Q. Is May 30th right or --

13 A. I -- I believe that's the day I arrived.

14 Q. Is it fair to say that as of the time you
15 were appointed to the FRTG, you had no training
16 or experience as an Engineer or specialize -- or
17 specialized knowledge of Engineering?

18 A. Definitely true.

19 Q. Is it also fair to say that at no point
20 before you became involved with the FRTG, in your
21 training or career had you studied, had

22 responsibility for, or otherwise been involved
 23 with oil wells or oil spills?
 24 A. Correct.
 25 Q. Also fair to say, at no point before you
 00030:01 became involved with the FRTG in your training or
 02 career, had you studied, had responsibility for,
 03 or otherwise been involved with any effort to
 04 quantify or estimate the flow of hydrocarbons
 05 from an oil well?
 06 A. That is true.
 07 Q. You were -- you were and or a terrestrial
 08 ecologist?
 09 A. Indeed.
 10 Q. During your first several months with the
 11 FRTG, you primarily worked out of BP Headquarters
 12 in Houston; is that correct?
 13 A. Correct.
 14 Q. And so that started on May 30th and
 15 continued until August, July?
 16 A. I -- I believe it was the very early part
 17 of August. I -- I don't remember the exact date.
 18 Q. And were you here four days a week, five
 19 days a we -- or at Houston four or five days a
 20 week or -- or --
 21 A. Well, in general, I was there seven days
 22 a week, although I had a few trips away from
 23 that, to -- to meetings or things.
 24 Q. And is it fair to say that you worked
 25 closely with BP Officials from the time you
 00031:01 started with the FRTG, in May of 2010, at least
 02 until you left Houston in August?
 03 A. When you say "worked closely," do you
 04 mean in close proximity, or in what way do you
 05 mean "closely"?
 06 Q. Well, let's start within close proximity,
 07 and then we'll go elsewhere.
 08 A. Yes. I believe I was on the third floor
 09 of the -- you know, right -- at the BP Crisis
 10 Center.
 11 Q. And were other -- were BP Officials on
 12 the third floor with you?
 13 A. BP Engineers and Technicians were -- were
 14 there, I guess, yeah.
 15 Q. And did you consult with BP Officials on
 16 a regular basis during this period?
 17 A. I did not, no.
 18 Q. Okay. Did others with the FRTG consult
 19 on a -- on a regular basis with BP Officials
 20 during this period from May of 2010 until August
 21 of 2010?

Page 31:25 to 33:25

00031:25 A. I'm not aware of -- of what I would call
 00032:01 consultation or regular consultation. We

02 relayed -- they relayed data requests to David
03 Rainey and -- and a few others at the -- at BP,
04 but I don't believe anything I would qualify as
05 consultation.

06 Q. (By Mr. Roman) When you say "they," who
07 are you referring to?

08 A. I -- I would be referring to the --
09 primarily the Team Leads of the Flow Rate
10 Technical Group.

11 Q. So the -- the -- we'll talk about them in
12 a -- in a few minutes.

13 But -- but the Team Leads would
14 communicate directly with BP Officials with --
15 with informa -- with information requests?

16 A. No. Those were -- those came through
17 either Dr. McNutt, myself, or occasionally
18 through other people.

19 May I go back to an earlier part of your
20 question?

21 Q. Surely.

22 A. I -- I can't remember how you phrased it,
23 but when you said flow -- did you ask if the Flow
24 Rate Technical Group met regularly with BP?

25 Q. Well, whether Flow Rate Technical Group
00033:01 Members.

02 A. Okay. Right, right. I guess I was
03 thinking that -- for clarification, Dr. McNutt
04 was in regular communication with -- with BP.

05 Q. Okay. And can you please explain what
06 you mean by "regular communication"?

07 A. She attended the twice daily BP Lead
08 Crisis Response Briefings. There would be one
09 about 6:00 o'clock in the morning, 6:00 or 6:30,
10 another one about 6:00 o'clock in the evening.
11 She attended those when she was -- was in the
12 building generally, and it was -- yeah, those
13 types of things.

14 Q. And when was she in the building?

15 A. Oh, in every day that she was in Houston.

16 Q. And was she in Houston every day from at
17 least May until August of 2010?

18 A. Not every day. She also sometimes
19 traveled for meetings, things such as that, so --

20 Q. Was she there the great majority of the
21 day?

22 A. The great majority of the time, yes.

23 Q. And do you know if she had other
24 communications with BP Officials other than these
25 twice daily Meetings?

Page 34:03 to 34:08

00034:03 A. Yeah. My -- my remembrance, or being in
04 there is, yes, that she had phone calls, she had
05 E-mails. Sometimes people from BP would drop by

06 throughout the day. Sometimes she'd go to
07 meetings that, I believe, included BP Scientists
08 Technicians.

Page 34:25 to 35:02

00034:25 Q. And what did she tell you those times
00035:01 that she told you about the communications that
02 she had with BP Officials?

Page 35:06 to 35:20

00035:06 A. Well, I guess I would say most of the
07 time it dealt with what the latest plans and
08 capabilities were for things such as containment,
09 you know, containment of the spill. It involved
10 a lot of times discussions about what might be
11 going on with weather and hurricane forecasts,
12 whether they're going to move things in and out;
13 sometimes some frustrations about being able to,
14 you know, get some of the data requests that had
15 come in. I guess just general things such as
16 that.
17 Q. (By Mr. Roman) And did she ever tell you
18 that she talked about flow rate estimates or --
19 or anything related to -- to the extent to which
20 oil was flowing from the DEEPWATER HORIZON?

Page 35:23 to 36:03

00035:23 A. I don't recall her ever commenting or
24 ever saying about discussions with BP about flow
25 rate information that wasn't released, you know,
00036:01 through the -- the standard flow rate process. I
02 know no advanced conversations that I remember
03 her mentioning to me.

Page 36:17 to 36:24

00036:17 Q. Were you aware that -- that during this
18 time BP was also developing its own flow rate
19 estimates?
20 A. I was not aware of that.
21 Q. During the time you were with FRTG, did
22 FRTG ever encounter any stonewalling from BP in
23 response to its requests for information relating
24 to flow rate issues?

Page 37:04 to 37:17

00037:04 THE WITNESS: Yeah.
05 A. I know from conversations with some of

06 the Members, the Subteam Members, as well as my
07 own experience, that there were delays in getting
08 some of the information. There was frustration
09 on the part of some of the -- some of the Team
10 Leads that repeated calls for -- for data for --
11 to BP were not forthcoming as quickly as they
12 would like for us to be able to come up with the
13 estimates.

14 I don't know -- in regard to your literal
15 question, you used "stonewalling." That almost
16 implies an intent that I -- I hesitate to -- to
17 have described, anyway.

Page 38:05 to 38:09

00038:05 Q. (By Mr. Roman) Sure. Do you -- do you
06 recall any time when the FRTG made a request for
07 information that BP declined to look for that
08 information or to try and provide that
09 information?

Page 38:13 to 38:19

00038:13 A. Leave -- leaving aside the issue of the
14 timing and how quickly they've come?
15 Q. (By Mr. Roman) (Nodding.)
16 A. No, I do not.
17 Q. You do not recall any time when BP
18 refused to do so?
19 A. I do not recall, no.

Page 39:09 to 39:13

00039:09 Q. (By Mr. Roman) Do you recall a time when
10 BP in response to a request for information from
11 the FRTG got the information and then refused to
12 disclose that information to the FRTG?
13 A. None that I'm personally aware.

Page 39:21 to 39:25

00039:21 Q. (By Mr. Roman) To the extent that the
22 FRTG believes that BP was not as quick in
23 responding to requests for information as it
24 would like, do you ascribe any improper motives
25 to BP in any delays?

Page 40:04 to 40:05

00040:04 A. In my personal capacity, I hesitate to
05 ascribe any ill motives.

Page 40:12 to 40:14

00040:12 Q. (By Mr. Roman) You're aware of no
13 circumstance, are you, where the F -- where BP
14 withheld information from the FRTG?

Page 40:17 to 40:21

00040:17 A. I don't personally recall any, no.
18 Q. (By Mr. Roman) In the end, can you
19 identify anything requested by the FRTG of BP to
20 which BP had access that it did not ultimately
21 provide to the FRTG?

Page 40:23 to 40:23

00040:23 A. I recall --

Page 40:25 to 42:03

00040:25 A. I recall a lot of frustrations in terms
00041:01 of timing, how long it took to get some things;
02 the quality of some of the data the quality of
03 some of the videos, in particular; but I'm not
04 aware personally of any information that flat out
05 was not available.
06 Q. (By Mr. Roman) Who --
07 A. That would have been -- that would have
08 been -- that would have -- that lack of
09 information of that nature would have been most
10 evident to the Team -- the Subteam Leads -- you
11 know, the technical people -- rather than me.
12 Q. Who do you recall expressing frustration
13 about BP's responses to requests for information?
14 A. The primary group that I recall was the
15 Plume Team, and it was generally over the quality
16 of the video that they were able to obtain to do
17 their image analysis.
18 Q. That was their primary frustration?
19 A. That was the one for which I heard the
20 most -- of which I heard the most.
21 Q. And when you referred earlier to a
22 quality of information issue, was that what -- to
23 what you were referring, the quality of the
24 video?
25 A. Yes.
00042:01 Q. Okay. And was BP to blame, in your view,
02 for the -- what was perceived to be by the Plume
03 Team a poor quality -- poor quality video?

Page 42:08 to 43:05

00042:08 A. I don't know enough about how the initial

09 data were gathered to -- you know, to know
 10 whether it was simply that was all that was
 11 available, that that was the best; or if there
 12 was better available, it wasn't provided. I
 13 don't honestly know.

14 Q. (By Mr. Roman) I mean, the Plume Team
 15 wasn't complaining, was it, that -- that BP was
 16 degrading the quality of the video or otherwise
 17 intentionally decreasing its quality?

18 A. I don't recall any discussions about
 19 intentional degradation of quality. I -- I
 20 believe it was more geared on the provision; just
 21 the provision of the data, that they were
 22 given -- especially in the beginning, they were
 23 given video that they literally felt they
 24 couldn't work with and come up with a
 25 scientifically defensible estimate. So a request
 00043:01 went back for -- for better quality information.

02 Q. Right. But to the extent that -- that
 03 the -- the video was a poor quality, they did not
 04 ascribe blame to BP for -- for that poor quality,
 05 did they?

Page 43:07 to 44:19

00043:07 A. Yeah. I -- I don't recall any -- well, I
 08 recall objections to -- I recall that there were
 09 communications asking if this was the best that
 10 they could provide, was this truly the best they
 11 could provide.

12 Q. (By Mr. Roman) Other than frustrations
 13 expressed by the Plume Team over the quality of
 14 the video, what other frustrations do you recall
 15 the Plume Team Leaders expressing to you about
 16 BP's response to their request for information?

17 A. There were desires to get better
 18 information, or a good quality information about
 19 some of the dimensions of components that could
 20 be viewed in the video, because they used that
 21 in -- in their analysis in terms of for a scale.

22 Q. Who -- who expressed those desires?

23 A. Again, that would be Members of -- of the
 24 Plume Team. Some of the Engineering dimensions
 25 and -- and such would also have been important
 00044:01 for the -- the Nodal Analysis Team. I do
 02 remember there were requests for information on
 03 that.

04 I don't recall if those included
 05 expressions in frustration or not.

06 Q. And other than that, do you recall any
 07 expressions of frustration with respect to BP's
 08 production of information?

09 A. None that come to mind now, no.

10 Q. And do you recall -- getting back to the
 11 video just for one second, do you recall what

12 video or what the video was specifically of?
13 A. In the case of -- yeah. It would have
14 been video of the hydrocarbons escaping from the
15 damaged riser.
16 Q. And that's the only video to which you
17 were referring?
18 A. Right. It's the only video that I'm
19 aware of was -- was used.

Page 44:24 to 47:14

00044:24 (Exhibit No. 8803 marked.)
25 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
00045:01 what's been marked as 8803 -- it's Tab 3 in
02 everybody's notebook -- and it is the "AGREED
03 30(b)(6) DEPOSITION NOTICE OF THE UNITED STATES."
04 Have you seen this document before?
05 A. (Reviewing document.)
06 I believe this is the document that my
07 Counsel has reviewed with me.
08 MR. BENSON: There's -- there's a
09 lot more to it. Is there something else in the
10 exhibit?
11 A. Right. I don't believe I'm familiar with
12 the tables that begin after Page 14.
13 Q. (By Mr. Roman) Okay. We can just leave
14 those to the side for right now. Let's just
15 focus on the Notice, which is the first, I don't
16 know, 14 pages of the exhibit.
17 A. (Nodding.)
18 Q. Is it your understanding that you have
19 been designated to testify on behalf of the
20 United States in response to this Notice?
21 A. Yes.
22 Q. And, specifically, you have been testi --
23 designated to testify with respect to Topic
24 Numbers -- and you might want to turn to this
25 just to make sure we're on the same page -- 43,
00046:01 44, 47, 50, and 51, to the extent that those
02 topics are not being covered by Mr. Guthrie and
03 Mr. Maclay.
04 A. (Nodding.)
05 Q. 90 to 95, 97 and 98.
06 A. Yes.
07 MR. BENSON: Let me -- let me ask
08 you to hold on for one second. If we can -- I
09 think ninety -- in the -- in the 96, 97, 98,
10 there may be a discrepancy.
11 MR. ROMAN: We did not des -- I
12 don't believe you designated him for 96.
13 THE WITNESS: Right. I heard only
14 97 and 98.
15 MR. BENSON: Okay. And did you say
16 97 and 98?
17 MR. ROMAN: I did.

18 MR. BENSON: Okay. Let me -- let me
 19 just read through them quickly.
 20 (Reviewing exhibit.)
 21 Right. I think he's designated for 96
 22 and 98, and not 97. 97 deals with dispersants.
 23 There was a correction on this shortly after he
 24 was designated, but it may be different than it
 25 was first --

00047:01 MR. ROMAN: Okay.
 02 MR. BENSON: -- designated.
 03 Q. (By Mr. Roman) Is that your
 04 understanding, Mr. Sogge?
 05 A. (Reviewing document.)
 06 Right. Leave -- leaving aside the
 07 dispersant one, yes.
 08 Q. Okay. And you are prepared -- well, and
 09 you understand that you're testifying on behalf
 10 of the United States Government, and specifically
 11 as designated, the FRTG, the Federal Interagency
 12 Solutions Group, and the Environmental Protection
 13 Agency?
 14 A. With regard to -- to these items, yes.

Page 47:24 to 48:07

00047:24 Q. Are you prepared to testify today on
 25 behalf of the United States concerning all the
 00048:01 topics for which you've been designated?
 02 A. Yes.
 03 Q. What did you do to prepare to testify?
 04 A. Read a lot of documents and spent quite a
 05 bit of time on the phone with other people.
 06 Q. Let's start with -- with the phone
 07 conversations. Who did you talk to?

Page 48:12 to 48:14

00048:12 THE WITNESS: Okay.
 13 A. I spoke with Dr. McNutt, with Dr. George
 14 Guthrie, Dr. Vic Labson.

Page 48:18 to 48:22

00048:18 A. Don Maclay, and Martha Garcia, Matt
 19 Lee-Ashley, Rich Camilli, Admiral Allen, Dana, I
 20 believe, Tusip -- Tulis, excuse me, Dana Tulis,
 21 T-u-l-i-s, I believe. There may be one or two
 22 other people who are not coming to mind.

Page 48:24 to 49:05

00048:24 A. I believe I mentioned Admiral Allen.
 25 Q. (By Mr. Roman) You did.

00049:01 A. Yes.
02 Q. And was Counsel on the phone with you
03 during these conversations, or did you just have
04 these one-on-one with -- with the individuals?
05 A. Counsel was present.

Page 49:10 to 50:16

00049:10 Q. (By Mr. Roman) Did you speak with any of
11 these persons more than once?
12 A. Dr. McNutt, I spoke to her individually,
13 as well as jointly with Admiral Allen.
14 Q. Okay. And do you recall what documents
15 you reviewed?
16 A. Several -- several binders worth of
17 E-mails, and, you know, the final Flow Rate
18 Technical Group Report, et cetera.
19 Q. Did you review any documents that, to
20 your knowledge, have not been produced in this
21 litigation?
22 A. No.
23 Q. Did you review any pleadings any
24 complaints, answers, any Court filings, Court
25 papers?
00050:01 A. Other than -- than this document, none
02 that I remember at all.
03 Q. And "this document," you're referring to
04 the Notice of Deposition?
05 A. Right. Exhibit 8803.
06 Q. Did you review any transcripts of
07 depositions or anything like that?
08 A. No, sir.
09 Q. Did you do anything else to prepare,
10 other than reading a lot of documents and
11 spending a lot of time on the phone?
12 A. Well, I -- I guess I would say I'm -- you
13 know, I brought to bear my experience of spending
14 the two months there in Houston during the event.
15 Q. So you thought about that some?
16 A. Oh, yeah.

Page 51:12 to 52:01

00051:12 (Exhibit No. 8804 marked.)
13 Q. (By Mr. Roman) Okay. A binder clip
14 having been kindly provided, I'm handing you
15 what's been marked as Exhibit 8804 --
16 A. Thank you.
17 Q. -- which is Tab 4 in everyone's notebook.
18 I'll ask if you've seen what's been
19 marked as 8804 before?
20 A. I have indeed.
21 Q. What is 8804?
22 A. It is the Final Report from the Flow Rate

23 Technical Group.
24 Q. And 8804 completely and accurately sets
25 forth the FRTG's findings and conclusions in this
00052:01 matter?

Page 52:05 to 52:13

00052:05 A. The Report summarizes the -- the work of
06 the Flow Rate Technical Group, its Subteams, and
07 some of the affiliated information we brought to
08 bear, and was designed to really provide an
09 evaluation of how the different techniques
10 compared in estimating flow rate under those
11 challenging conditions.
12 Q. (By Mr. Roman) And the FRTG stands behind
13 all the statements in the Report, does it not?

Page 52:16 to 53:09

00052:16 A. This document has been -- was reviewed by
17 Dr. McNutt, by the Subteam Leads, and things, so
18 I would say that the -- the Flow Rate Technical
19 Group stands behind it.
20 Q. (By Mr. Roman) Directing your attention
21 to the first page of the "EXECUTIVE SUMMARY,"
22 probably about the fourth page of the exhibit,
23 maybe more than that. There we go.
24 Do you have that in front of you?
25 A. First page of the "EXECUTIVE SUMMARY,"
00053:01 yes.
02 Q. Okay. And directing your attention
03 specifically to the second paragraph on that
04 page, just the first clause: "Given the lack of
05 precedents..."
06 Do you see that?
07 A. I do.
08 Q. What did the FRTG mean by "lack of
09 precedents"?

Page 54:02 to 55:06

00054:02 A. Very soon after I arrived in Houston
03 to -- to assist Dr. McNutt and -- and to work on
04 the FRTG activities, she -- she explained to me
05 that there had been no oil spill or well -- of
06 this type from a well that far down. So there
07 really wasn't any sort of scientific precedent or
08 procedural precedent for how to estimate the --
09 the flow of oil from something this far down.
10 And even though that there had been
11 something like a -- a reservoir analysis is not
12 unprecedented at being able to apply it to this
13 particular situation and understand how -- how

14 what is coming out of the well even translates to
 15 what is going to end up on the surface was very,
 16 very uncertain, the great depth, what would
 17 happen with dissolution, things such as that.

18 So I think that's the -- that's the
 19 context for that term.

20 Q. (By Mr. Roman) And, in fact, had -- are
 21 you aware of anyone ever before attempting to
 22 quantify or estimate the flow of hydrocarbons
 23 from an underwater -- from -- I'm sorry, from an
 24 uncontrolled deepwater well such as -- as the
 25 Macondo Well?

00055:01 A. In -- as -- at a personal level, no, I'm
 02 not aware of any.

03 Q. And you agree, would you not, that it was
 04 a extraordinarily complicated and complex task --
 05 task?

06 A. Yes, you're characterizing it well.

Page 58:16 to 59:05

00058:16 Q. (By Mr. Roman) All right. And, in fact,
 17 are you aware of any Industry Standard for
 18 estimating the amount of oil spilled from an
 19 uncontrolled deep sea well?

20 A. I'm not personally aware of an Industry
 21 Standard on that. I'm aware that there are some
 22 standard techniques that are applied by -- by
 23 agencies in oil spill situations such as flyovers
 24 and things such as that.

25 Q. Okay. But I'm asking you, again, you
 00059:01 know, a -- a narrower question --

02 A. Okay.

03 Q. -- which is: Was there an Industry
 04 Standard for estimating the amount of oil spilled
 05 from an uncontrolled deep sea well?

Page 59:08 to 59:09

00059:08 A. In my personal capacity, I -- I'm not
 09 aware of any.

Page 60:10 to 61:09

00060:10 A. I -- I don't know that she has a degree
 11 in Engineering, but I know that she has ex --
 12 she -- she's got experience, sure. She has
 13 training in physics. She has experience working
 14 with Engineers. When she was at MBARI, Monterey
 15 Bay Research Institute, one of the branches that
 16 she oversaw -- in fact, I think it was the
 17 largest branch of MBARI -- was Teams of Engineers
 18 working on oceanic issues.

19 Q. Do you know if she had any prior
20 experience with oil wells or oil spills or
21 measuring carbon -- hydrocarbon flow rates?
22 A. I heard her talk about familiarity with
23 the oil spill in the Santa Barbara Channel. I
24 don't know whether that was direct, firsthand
25 experience or if that was something that she --
00061:01 she knew some other -- some other way.
02 Q. Do you know whether she was involved in
03 the cleanup of the oil spill in the Santa Barbara
04 Channel?
05 A. I don't know that specifically.
06 Q. Do you know if she was involved in -- in
07 trying to estimate the amount of oil spilled in
08 the Santa Barbara Channel?
09 A. Again, specifically, I -- I don't know.

Page 61:16 to 61:20

00061:16 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
17 what's been marked as Exhibit 8805, which is
18 Tab 6 --
19 A. Thank you.
20 Q. -- in everybody's notebooks.

Page 61:22 to 62:05

00061:22 Q. (By Mr. Roman) Have you seen this
23 document before?
24 A. Yes, I have.
25 Q. What is it?
00062:01 A. This is a -- an outline, a very, very
02 brief Summary of the Flow Rate Technical Group in
03 terms of the -- the Teams that comprised it, what
04 they did, and then the individuals within those
05 Teams.

Page 63:10 to 63:15

00063:10 Q. Okay. Mr. Lehr was the Head of the Plume
11 Team, Mr. Labson was Head of the Mass Balance
12 Team, Mr. MacLay was Head of the Reservoir Team,
13 and Mr. Guthrie was Head of the Nodal Analysis
14 Team, correct?
15 A. Correct.

Page 64:25 to 65:04

00064:25 Q. (By Mr. Roman) The plan was for there to
00065:01 be a single FRTG flow rate estimate, correct, as
02 opposed to Reports -- as opposed to a Mass
03 Balance estimate, a Nodal Analysis estimate, and
04 so forth?

Page 65:06 to 66:03

00065:06 A. Well, I think it's fair to say that in --
07 in terms of the charges to the Team, they were
08 asked to each Team come up with their estimate.
09 And the way that Dr. McNutt repeatedly framed it,
10 in my experience, was that we would -- we would
11 look for convergence, if it occurred, on those
12 estimates.

13 But you -- you -- based on this variety
14 of approaches, you -- you almost wouldn't expect,
15 you know, them arriving at a complete, same
16 number.

17 Q. (By Mr. Roman) And why is that?

18 A. Well, each -- each approach has inherent
19 limitations, assumptions, and things such as
20 that. The most evident one is the -- is the Mass
21 Balance estimate, which is based primarily on
22 what's on the top of the surface, and what's been
23 skimmed and collected and things such as that.
24 Not all of the oil is going to -- going to rise
25 to the surface, so you might expect it to be a
00066:01 lower-bound type estimate.

02 Q. What were the limitations of the -- of
03 the Plume Team analysis?

Page 66:07 to 66:21

00066:07 capacity.

08 A. Yeah. My personal understanding is that
09 there were complications in applying plume
10 analysis in this situation, because of things
11 such as very turbulent eddies, very complex
12 flows, especially early on before the riser was
13 cut, things such as that. It's a -- it's a -- as
14 stated in the Final Report, I believe, in their
15 Appendix, something like plume analysis is a
16 simple concept, but it's much more challenging to
17 put it into practice 5,000 feet below the
18 surface.

19 Q. (By Mr. Roman) And how about the
20 limitations of the Reservoir Team analysis? What
21 were those?

Page 67:03 to 67:14

00067:03 A. In -- in my experience, and based on, you
04 know, conversations and E-mails that I've
05 reviewed, it comes down to some of the
06 assumptions that you -- that you have to make or
07 that you may make, some of the parameters of the
08 geological strata. Things such as that rely on

09 proprietary data which can sometimes be difficult
 10 to obtain. So, it -- it's really those sorts of
 11 things, where do you get your parameters, what
 12 types of assumptions you have to make.
 13 Q. And then how about the limitations of the
 14 Nodal Analysis Team?

Page 67:16 to 68:01

00067:16 A. Yeah. I guess I would say that's similar
 17 to the Reservoir Team in that it is a -- it's a
 18 modeling effort. It's sometimes based on things
 19 that you do not -- you do not firsthand see.
 20 For example, in the Report, they explain
 21 how for the nodal analysis, in this particular
 22 case, there were questions about the flow path up
 23 the -- up the riser, was the riser damaged,
 24 was -- was it going up one way versus other. And
 25 some of those things strongly influenced the --
 00068:01 the results that you'll get.

Page 68:13 to 69:06

00068:13 MR. ROMAN: Do you want to go ahead
 14 with the statement?
 15 MR. BENSON: Sure. Before the
 16 break, you had asked about people that Mr. Sogge
 17 talked to in preparing for his deposition. He
 18 did pretty well, but he -- we missed -- we missed
 19 a couple, and I can give you those names right
 20 now. It's Bill Lehr, L-e-h-r. Grant Bromhal.
 21 I've given Kym the best spelling I've got for
 22 that. And then Craig Mattieson and Greg Wilson
 23 at EPA.
 24 Q. (By Mr. Roman) Are those four individ --
 25 individuals with whom you also spoke?
 00069:01 A. Yes.
 02 Q. And with the -- combined with the ones
 03 that you listed earlier, to the best of your
 04 recollection, are those -- is that the universe
 05 of those with whom you spoke?
 06 A. Yes.

Page 72:05 to 72:20

00072:05 MR. ROMAN: Let me go ahead and mark
 06 as Exhibit --
 07 THE COURT REPORTER: 8806.
 08 (Exhibit No. 8806 marked.)
 09 MR. ROMAN: -- as Exhibit 8806 a
 10 document that can be found at Tab 51.
 11 Q. (By Mr. Roman) Mr. Sogge, have you seen
 12 what's been marked as Exhibit 8806 before?

13 A. Let me take a moment to look at it.
14 (Reviewing document.) I don't recognize this
15 document, no.

16 Q. Let me ask, at the beginning: What --
17 what is the -- do you see at the very first line,
18 there's a reference to "ISPR"? It says: "Notes
19 on 18 October ISPR call with McNutt." Do you
20 know what the "ISPR" stands for?

Page 72:22 to 73:15

00072:22 A. I do not, not that abbreviation.

23 Q. (By Mr. Roman) Directing your attention
24 to the second page of this document, do you see
25 the bullet where it says: "Did everyone work
00073:01 out?" And then below that, there is text. Do
02 you see that?

03 A. The second bullet point from the top?

04 Q. Yes.

05 A. I do.

06 Q. And the text reads: "There were a couple
07 of problematic people. There were definitely
08 people who were not even B-team members who
09 contributed nothing to the end results and spent
10 all their time on CNN and other talk shows
11 speculating on results and data that they hadn't
12 even seen, irritating conscientious team members
13 who were working hard to get the answers."

14 Do you see that?

15 A. That's the highlighted text, yes.

Page 74:02 to 76:02

00074:02 Q. And I -- separate and apart from the
03 document --

04 A. Okay.

05 Q. -- did Ms. McNutt ever express to you
06 concerns about FRTG Members, certain FRTG
07 Members?

08 A. Con -- concerns in what regard?

09 Q. Well, whether there "...were not even
10 B-team members who contributed nothing to the end
11 results and spent all their time on CNN and other
12 talk shows speculating on results and data they
13 hadn't even seen, irritating conscientious team
14 members who were working hard to get the
15 answers."

16 A. No, she -- she never presented anything
17 to me in that -- in that respect or in those
18 kinds of words.

19 Q. Did she express frustrations or
20 disappointment with any FRTG Team Members?

21 A. She expressed some frustration with some
22 of the Members giving interviews -- yeah, giving

23 interviews on -- on -- on news shows and such.
 24 And I can't remember how she characterized it,
 25 but I guess, basically, her concerns about
 00075:01 imprecise language.
 02 Q. Do you recall what her concerns were with
 03 the imprecise language being used?
 04 A. I think, as much of her concerns were
 05 throughout the entire incident, she was -- she
 06 was concerned that we convey clearly what the
 07 Team's ranges, what their -- what their estimates
 08 were -- were coming in at. And it can be
 09 confusing to be hearing from, you know, different
 10 individuals, so --
 11 Q. Do you recall any Members in particular
 12 about whom Ms. McNutt was concerned, either about
 13 making -- doing public interviews or otherwise?
 14 A. I believe once when I was in the office
 15 with her, she mentioned to me that I -- Ira, I
 16 believe, Ira Leifer, Dr. Leifer, had been on the
 17 news, which I seem to recall, with CNN. And
 18 there may also have been a case where she
 19 mentioned Dr. Wereley, Steve Wereley.
 20 Q. Do you recall what she said about
 21 Mr. Leifer?
 22 A. I -- I -- I don't remember the specifics.
 23 That was a very long time ago. But I seem to
 24 recall it being something about feeling that he
 25 wasn't as -- as responsible or -- you know, from
 00076:01 a -- he wasn't necessarily speaking responsibly
 02 about -- about the estimate.

Page 78:08 to 79:09

00078:08 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
 09 what's been marked as Exhibit 8808, which is --
 10 excuse me -- Tab 54 in the notebooks and ask if
 11 you've seen this document before.
 12 A. Let me take a moment to look through it.
 13 (Reviewing document.) No, I don't
 14 believe I've seen this specific E-mail.
 15 Q. I would like to direct your attention to
 16 the se -- I guess the E-mail dated June 14th,
 17 2010, at 6:23 p.m., from Mr. Lasheras to Mr. Lehr
 18 and Ms. McNutt. Do you see that?
 19 A. I do.
 20 Q. And there, Mr. Lasheras writes: "Marcia,
 21 I would appreciate it if you would follow up with
 22 your opening statement last night and ask Ira to
 23 resign from our group. He is a loose cannon that
 24 not only is making a fool of himself, but is a
 25 major...embarrassment to all of us."
 00079:01 Do you see that?
 02 A. I do.
 03 Q. And do you know to whom Mr. Lasheras was
 04 referring?

05 THE COURT REPORTER: Thank you.
 06 A. In terms of the term "he"?
 07 Q. (By Mr. Roman) Well, who is Ira? Is that
 08 Mr. Leifer?
 09 A. Yes, I believe so.

Page 79:21 to 80:05

00079:21 Q. (By Mr. Roman) Do you know if Ms. McNutt
 22 asked Mr. Leifer to resign?
 23 A. I'm not aware of that happening, and I --
 24 I believe -- yeah, I believe his -- his
 25 authorship on the Plume Team Report that would
 00080:01 indicate he didn't.
 02 Q. Do you know if Ms. McNutt wanted anybody
 03 else to resign?
 04 A. I don't ever recall Dr. McNutt mentioning
 05 anyone that she wanted to resign.

Page 85:25 to 87:05

00085:25 Q. And based on these est -- estimates, the
 00086:01 FRTG concluded that there was a cumulative
 02 release of approximately 4.9 million barrels,
 03 correct?
 04 A. The -- the Flow Rate Technical Group in
 05 conjunction with the Department of Energy Teams,
 06 yes.
 07 Q. The Government estimate -- the final
 08 Government estimate was 4.9 million barrels
 09 released?
 10 A. The Government estimate from the
 11 standpoint of the Flow Rate Technical Group's
 12 work, yes.
 13 Q. Okay. And of that 4.9 million barrels,
 14 BP had collected approximately 800,000 barrels,
 15 correct?
 16 A. I believe that's correct.
 17 Q. Now, the FRTG's estimates were all
 18 subject to a plus or minus uncertainty of 10
 19 percent, correct?
 20 A. The individual estimates of the Teams
 21 were not necessarily that. This Government
 22 estimate shown in this diagram, that trending
 23 line, was a sign -- plus or minus 10 percent,
 24 yes. But each individual Flow Rate Subteam's
 25 estimates were not necessarily plus or minus 10
 00087:01 percent.
 02 Q. I'm asking right now about the FRTG
 03 estimate, the publicly announced estimate as
 04 reflected in Figure 6, that was subject to a plus
 05 or minus uncertainty of 10 percent, correct?

Page 87:07 to 87:19

00087:07 A. The -- how does it -- continuous curve
08 estimate shown in Figure 6, yes, that was plus or
09 minus 10 percent.
10 Q. (By Mr. Roman) So that means that these
11 estimates could have been 10 percent higher or 10
12 percent lower, correct?
13 A. Correct.
14 Q. So there could have been as many as 5.4
15 million barrels, give or take, or as few as 4.4
16 million barrels, correct?
17 A. Correct.
18 Q. But the FRTG's absolutely certain that
19 was within those parameters, correct?

Page 87:21 to 88:04

00087:21 A. "Absolutely certain," interesting
22 concept. The modeling results and the consensus
23 of the Team was that that was a -- that was a
24 scientifically defensible estimate.
25 Q. (By Mr. Roman) Okay. I'm not sure that
00088:01 that answers the question. Was the FRTG
02 absolutely certain that the range of barrels of
03 oil released was between 4.4 million and 5.4
04 million?

Page 88:06 to 88:21

00088:06 A. From a scientific standpoint, I think --
07 I'm -- I'm trying to answer correctly. From a
08 scientific standpoint, especially with modeling
09 as opposed to an absolute measurement, you seldom
10 come up with absolute certainty. At one point --
11 again, for context, at one point during the spill
12 early on, especially when the Flow Team was given
13 its charter, we were expecting that there would
14 be full containment by vessels and then,
15 therefore, there would be a measurement of the
16 oil flowing, that gives you, in essence, absolute
17 certainty within some Engineering difference.
18 But I don't believe that when you are
19 talking about modeling, from a scientific
20 standpoint, that you tend to use terminology, at
21 least I certainly don't, of "absolute certainty."

Page 91:13 to 91:16

00091:13 (Exhibit No. 8809 marked.)
14 Q. (By Mr. Roman) Okay. I'm handing you,
15 Mr. Sogge, what's been marked as Exhibit 8809 --
16 sorry -- which is Tab 5 in the notebooks.

Page 91:20 to 92:11

00091:20 Q. (By Mr. Roman) Have you seen what's been
21 marked as Exhibit 8809 before?
22 A. I believe so. This -- this looks like
23 the press release that -- that came out.
24 Q. This is the August 2 --
25 A. August 2nd, yeah.
00092:01 Q. -- August 2nd, 2010 FRTG Press Release?
02 A. M-h'm. It appears to be.
03 Q. Now, you'll see in the press release,
04 there's the reference to the \$53,000 barrels --
05 53,000 barrels as you testified just a moment
06 ago, and -- and you'll see in the third paragraph
07 the reference to the 4.9 million barrels.
08 Do you see that?
09 A. I'm sorry. In the third paragraph?
10 Q. Third paragraph, yes.
11 A. I -- I see it in the fourth.

Page 92:14 to 92:22

00092:14 Q. I'd like to direct your attention,
15 though, to the last paragraph, and specifically
16 to the last sentence, which reads: "Government
17 scientists will continue to analyze data and may
18 in time be able to further refine this estimate."
19 Do you see that?
20 A. I do. That's the final sentence?
21 Q. Right.
22 A. M-h'm.

Page 94:21 to 95:17

00094:21 Q. What, if anything, did the FRTG Subteams
22 do between August 2nd of 2010 and March 10, 2011,
23 to refine its flow rate estimates?
24 A. I recall some E-mails from Dr. McNutt to
25 the various Teams, raising some -- some issues
00095:01 about is everybody using the same conversion
02 rates; are we all using stock -- you know, the
03 stock tank barrels; are -- is everybody using the
04 same GOR; those such of thing -- those sorts of
05 things; and -- and making sure that everyone was
06 using comparable units and stuff. So, yeah, I
07 think that's -- that's true.
08 That didn't ultimately, I believe, change
09 the final number.
10 Q. Did it result in any changes of the
11 interim numbers? You know -- you know, the --
12 the numbers -- for example, you had the initial
13 flow rate estimate of 62,000 barrels and it
14 decreased, then went up again, then it decreased

15 again to -- and it ended at 53,000 barrels. Did
 16 any of those interim numbers change?
 17 A. Oh, no, not to my knowledge.

Page 96:14 to 96:24

00096:14 Q. (By Mr. Roman) Were the estimates -- as
 15 of August 2nd of 2010, had the FRTG estimates and
 16 analyses been peer-reviewed by anybody?
 17 A. Yes. M-h'm.
 18 Q. When did that peer-review process take
 19 place?
 20 A. Each of the FRTG Subteams handled the
 21 peer review for their own products as one step.
 22 And then there was a peer review of the overall
 23 Flow Rate Technical Group Report, you know,
 24 separately as we were compiling that.

Page 101:10 to 101:13

00101:10 Q. Okay. At the time that -- of the
 11 official chartering of the FRTG on May 19, 2010,
 12 the official Government flow rate estimate was
 13 5,000 barrels per day, correct?

Page 101:16 to 102:07

00101:16 A. Yeah, I don't know what -- whether there
 17 was even an official Government estimate before
 18 the FRTG was chartered.
 19 Q. (By Mr. Roman) You're -- you're familiar
 20 with the 5,000 barrel per day estimate, correct?
 21 A. I am.
 22 Q. And who did you understand that estimate
 23 to have -- estimate to have been?
 24 A. From NOAA, National Oceanic and
 25 Atmospheric Administration.
 00102:01 Q. And that's a --
 02 A. But --
 03 Q. -- and that's a Government agency,
 04 correct?
 05 A. Yes, but I -- I also understood that was
 06 a -- a preliminary estimate, very, very
 07 preliminary estimate.

Page 103:16 to 103:19

00103:16 Q. (By Mr. Roman) And the FRTG members
 17 understood that this \$5,000 -- 5,000 barrels per
 18 day was the official Government number until the
 19 FRTG came up with a different estimate, correct?

Page 103:21 to 103:24

00103:21 A. I wouldn't -- I wouldn't characterize it
22 that way. I -- I don't know that they were
23 recognizing that as an official Government
24 estimate at all.

Page 104:05 to 104:06

00104:05 Q. And some FRTG Members felt that the 5,000
06 barrel per day estimate was too high, correct?

Page 104:08 to 104:15

00104:08 A. I'm not aware of any Members expressing
09 they thought it was too high -- or excuse me --
10 yeah, too high.
11 Q. (By Mr. Roman) Well, you're -- you're
12 aware that some thought it was too low, correct?
13 A. Correct.
14 Q. And you're aware that some thought it was
15 just about right, correct?

Page 104:19 to 104:20

00104:19 A. I'm -- I'm not aware of anyone expressing
20 that opinion either.

Page 105:11 to 105:13

00105:11 Q. And are you aware of any FRTG Members who
12 felt that the 5,000 barrel per day estimate was
13 in the ballpark?

Page 105:15 to 105:20

00105:15 A. I guess it -- I guess it depends on what
16 you mean by "in the ballpark." Can you clarify
17 what you mean by that?
18 Q. (By Mr. Roman) Well, just about right, or
19 reasonable, within the range -- within the --
20 within the range of reasonableness.

Page 105:22 to 106:09

00105:22 A. I would say from a personal capacity, no,
23 I'm not -- not aware of anybody.
24 Well, may I restate that, if I may, or
25 revisit that.
00106:01 Dr. Lehr, who at -- who at that time was
02 with NOAA and was not an official Member of the
03 Flow Rate Technical Group, hence that date

04 matters, I believe was involved, to some degree,
05 in that initial 5,000 estimate.
06 So I would -- again, from my personal
07 capacity, I would strongly suspect that he felt
08 that that was at least a reasonable working
09 estimate at that time when he made that.

Page 107:01 to 107:01

00107:01 (Exhibit No. 8811 marked.)

Page 107:21 to 108:14

00107:21 Q. (By Mr. Roman) Now, the estimate -- the
22 FRTG estimate in these documents was, in fact,
23 the FRTG's preliminary best estimate of oil
24 flowing from the BP oil well, correct?
25 A. Yes, I would -- I would say that's --
00108:01 yeah.
02 Q. And that preliminary best estimate was 12
03 to 19,000 barrels per day, correct?
04 A. That was the lower bound range from the
05 Mass Balance Group, the actual estimate. That
06 doesn't quite characterize the full estimate.
07 Q. I'm sorry, so that 12 to 19,000 barrels
08 per day just reflected the analysis of the Mass
09 Balance Group and not the FRTG as a whole?
10 A. That 12 to 19,000 is the lower bound
11 established by the mass balance technique.
12 Q. But was that established by the FRTG or
13 adopted by the FRTG as its preliminary best
14 estimate?

Page 108:19 to 108:25

00108:19 A. Yeah. My understanding is that it was --
20 it was adopted as the -- as the best estimate of
21 the lower bound.
22 Q. (By Mr. Roman) By the FRTG?
23 A. Yes.
24 Q. Okay. And was there an upper bound
25 range?

Page 109:03 to 109:07

00109:03 A. My understanding is at this -- at this
04 time, with the data available to the Plume Team,
05 they did not feel comfortable establishing an
06 upper bound. They thought it could be 25,000
07 barrels per day or higher.

Page 110:18 to 110:20

00110:18 Q. (By Mr. Roman) So the FRTG at that -- as
19 of May 27, 2010 did not have an upper bound
20 estimate?

Page 110:22 to 110:24

00110:22 A. Yeah. My understanding, in looking at
23 these, was that the upper bound was at least
24 25,000, perhaps higher.

Page 114:24 to 115:09

00114:24 Directing your attention to -- to
25 Exhibit 8811 --
00115:01 A. Thank you.
02 Q. -- third paragraph says: "The only range
03 of flow rates that is consistent with all 3 of
04 the methods considered by the FRTG is 12,000 to
05 19,000 barrels per day."
06 Do you see that?
07 A. I do.
08 Q. And that was, in fact, the FRTG's view as
09 of May 27, 2010, correct?

Page 115:12 to 116:02

00115:12 A. Well, my -- my reading of this is -- is
13 literally, you know, as it's written, that this
14 is the -- this is the press release from the --
15 the FRTG.
16 Q. (By Mr. Roman) And the FRTG attempted to
17 be accurate in its -- in its press releases, did
18 it not?
19 A. It did, although I -- I recall that there
20 was some -- there was a -- I guess I would it a
21 miscommunication between the technical folks and
22 the Communications Team on how flows may have
23 been characterized in this particular instance.
24 Q. What do you recall about that?
25 A. That there was concern that this -- what
00116:01 was a lower bound was described in this press
02 release as being a full range of estimates.

Page 117:22 to 118:14

00117:22 Q. (By Mr. Roman) Okay. Now, it says that
23 the range is "...consistent with all 3 of the
24 methods considered..." and those three methods
25 were the analysis done by the Mass Balance Team,
00118:01 the analysis of the Plume Modeling Team, and then
02 they checked those analyses against the Riser
03 Insertion Tube Tool, or RITT, estimate, correct?

04 A. Well, as the press release says, the RITT
05 estimate was used as a -- as a reality check, in
06 essence, to say: "Is what we're describing here
07 logical?"

08 Q. But that was the third of the three
09 methods, the RITT -- the RITT tool estimate?

10 A. That's an estimate they used in this,
11 yeah. The RITT wasn't a formal part of the Flow
12 Rate Technical Group.

13 Q. Do you know if there were any methods
14 that were not considered?

Page 118:17 to 118:17

00118:17 A. Personally, I'm not aware of any.

Page 118:25 to 119:02

00118:25 Q. Do you know what level of certainty the
00119:01 Plume and Mass Balance Teams had for their
02 estimates as of May 27, 2010?

Page 119:05 to 119:14

00119:05 A. Personally, without reviewing the Report
06 for the Plume Team, I -- I don't really have any
07 idea.

08 In terms of the Mass Balance Team, I
09 believe that that -- that range they gave
10 represents their -- their scientific uncertainty.

11 Q. (By Mr. Roman) Their scientific
12 certainty?

13 A. The -- well, the 12,000 and 19,000 is a
14 lower bound minimum range.

Page 121:13 to 121:20

00121:13 Q. (By Mr. Roman) I'm not -- I'm not asking
14 you to extrapolate. I'm just -- I'm asking let's
15 take the -- let's take the -- the Mass Balance
16 Team.

17 A. M-h'm.

18 Q. You have an estimate on May 27th of
19 12,000 to 19,000 barrels of oil per day?

20 A. (Nodding.)

Page 124:05 to 124:05

00124:05 (Exhibit No. 8815 marked.)

Page 125:09 to 126:16

00125:09 These -- the estimates announced in the
 10 June 10, 2010 press **release** reflected the FRTG's
 11 view at the time and reflected the Members' best
 12 analyses, correct?
 13 A. Based on the available data that they had
 14 at that point, yes.
 15 Q. And directing your attention to the third
 16 paragraph of the press release --
 17 You're on the correct page, yes.
 18 A. Thank you.
 19 Q. -- which reads: "Dr. McNutt announced
 20 today that three of the scientific teams
 21 analyzing flow rates have reached updated
 22 assessments..."
 23 Do you see that?
 24 A. I do.
 25 Q. Okay. And one of the Teams that had
 00126:01 reached an updated assessment was the Plume
 02 Modeling Team, correct?
 03 A. Correct.
 04 Q. And what the Plume Modeling Team did was
 05 it reviewed additional video that was made
 06 available after May 27, correct?
 07 A. Correct, the post-riser cut video.
 08 Q. I'm sorry?
 09 A. The post-riser cut video. Sorry.
 10 Q. And based on that video, it concluded
 11 that "...the best estimate for...average flow
 12 rate for the leakage" before "insertion of the
 13 RITT" tool was "between" 25- and "30,000 barrels
 14 per day, but could be as low as 20,000 barrels
 15 per day, or as high as 40,000 barrels per day,"
 16 correct?

Page 126:18 to 126:22

00126:18 A. Based on the -- the writing in that
 19 news -- yeah, the news release, yes.
 20 Q. (By Mr. Roman) And you have no reason to
 21 believe that that's incorrect, do you?
 22 A. Not to my knowledge.

Page 130:19 to 133:05

00130:19 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
 20 what's been marked as **8815**, which is Tab 13, and
 21 ask if you've seen this document before?
 22 A. (Reviewing document.) I have. This is --
 23 this is the press release from June 15th.
 24 Q. This is the FRTG press release dated June
 25 15, 2010?
 00131:01 A. This is, I guess, what I would consider
 02 a -- a National Incident Command or a joint press
 03 release, yes.

04 Q. Is -- is -- let me just make it broader.
 05 This is a Government press release issued June
 06 15, 2010?

07 A. Yes.

08 Q. Five days after the status update
 09 provided on June 10th of 2010 by the FRTG?

10 A. Correct.

11 Q. Why did the FRTG revise its findings so
 12 soon after it just revised its findings?

13 A. Two -- two reasons, I guess, two core
 14 reasons that -- that I would explain. One is
 15 that the -- the capping -- excuse me, not the
 16 capping stack, but the -- the Department of
 17 Energy had new pressure readings from the -- the
 18 wellhead from the, you know, riser cut,
 19 post-riser cut period. And so they'd analyzed
 20 that. I think they had some -- some new
 21 information to bring to bear into the -- into the
 22 discussion.

23 As well, on -- when they put the top hat
 24 on, and they began gathering the hydrocarbons on
 25 the surface ships, they were gathering -- by this
 00132:01 period of time they were gathering about 14,000
 02 or 15,000 barrels per day on the DISCOVERER
 03 ENTERPRISE, and the Q4000 was also collecting, at
 04 max, up to about 9,000. So we were already
 05 having surface collection of about 24,000 barrels
 06 per day.

07 Despite that, you could still see that
 08 there's a lot of hydrocarbon skipping around the
 09 edges of the -- of the top hat device. So that
 10 suggested that at least some of the lower bound
 11 estimates that had been used before, they were no
 12 longer current, so --

13 Q. And the FRTG -- FRTG believed, or the
 14 Government believed that it was important to keep
 15 the public apprised of its latest analysis,
 16 correct?

17 A. We -- we tried always to keep the public
 18 available of new analyses, once we were
 19 confident.

20 Q. Even if that meant releasing estimates
 21 that it would revise later, correct?

22 A. Yes. There's a -- I mean, again,
 23 providing context, there was huge public interest
 24 in what was going on, what was spilling into the
 25 Gulf, what was going into the environment there.
 00133:01 And I -- I really think that the Flow Rate
 02 Technical Group, in addition to -- to being, you
 03 know, chartered and -- and answering to the NIC,
 04 really understood there was -- there was a public
 05 benefit to being able to provide the information.

00133:25 Q. Now, every time the Government revised
00134:01 its estimate, it revised them upwards, right?
02 A. I believe, over time, the estimates
03 increased, yes.

Page 134:25 to 135:02

00134:25 Q. Now, on June 15, 2010, the new estimate
00135:01 is 35,000 to 60,000 barrels per day, correct?
02 A. That is the range, yes.

Page 137:21 to 137:21

00137:21 (Exhibit No. 8816 marked.)

Page 139:08 to 140:02

00139:08 Q. Okay. Now, I'd like to direct your
09 attention to Ms. McNutt's June 9, 2010 E-mail to
10 Mr. Hines at 2:27 p.m. Do you see that?
11 A. I do.
12 Q. And she writes: "Vic - Seems to me it
13 would be a little difficult to argue in an
14 unbiased sense that you were going to throw out
15 the 15 unless you throw out the 40 as well. How
16 would you justify that? I mean, I taught the
17 statistics course at MIT for 15 years, and indeed
18 there is a valid statistical approach where one
19 throws out the 'outliers,' but not just one side
20 and not the other.
21 "Here is the full report with all of the
22 numbers. I don't think you have seen it, but it
23 is what Matt is basing the release on. I'm
24 totally cool with throwing out the outliers, but
25 not with just one on one side."
00140:01 Do you see that?
02 A. I do.

Page 142:07 to 142:13

00142:07 Q. And what Mr. Possolo was suggesting was
08 that they throw out the low -- that the FRTG
09 throw out the low end estimate, the 15,000 barrel
10 per day estimate, and just to go with -- but to
11 keep the high end estimate of 40,000 barrels per
12 day, correct?
13 A. No --

Page 142:16 to 143:12

00142:16 A. I -- I -- I don't believe that's what's
17 being suggested here at all.

18 Q. (By Mr. Roman) Okay. Then please te --
19 please tell me why I'm wrong.

20 A. Well, because this message is -- is from
21 Vic. I believe that Vic may have asked
22 Dr. McNutt if we needed to include those lower
23 estimates that were already bel -- that were
24 below what we already knew was escaping because
25 of surface collection.

00143:01 Q. Oh. So the suggestion to throw out the
02 low end estimates came from Mr. Hines and not
03 from Mr. Possolo?

04 A. I'm not even sure I'd characterize it as
05 a suggestion and without seeing, you know, maybe
06 the full E-mail exchange, if they had -- if they
07 had one on that. It may very well have been a
08 question.

09 Q. Okay.

10 A. We frequently got questions from the
11 communications people, as you can imagine, about
12 the technical aspects of something like this.

Page 151:08 to 151:21

00151:08 Q. Do you know if the FRTG's Final Report
09 reflected the DOE's analysis in any respect?

10 A. Certainly. In fact, you know, that the
11 continuous line graph, or the continuous line in
12 the graph that we've referred to several times
13 from -- from the FRTG Final Report, that is based
14 on the Department of Energy's pressure reading
15 estimate, you know, as, in essence,
16 back-calculated, as well by Dr. Hsieh's -- by
17 Dr. Hsieh's model. That line in and of itself
18 was -- was never -- was not estimated by any of
19 the individual Subteams. That was what we
20 considered the ground truth against which we
21 compared the FRTG Subteam estimates.

Page 157:14 to 158:11

00157:14 Q. Okay. Now, you -- you said earlier that
15 there was a lot of pressure to -- to come up with
16 the best spill estimates, I think that's what you
17 said. Is that the only type of pressure that
18 FRTG Members experienced?

19 A. Absolutely. I mean, we -- we were very
20 cognizant of the public's interest in knowing
21 what was going in, the value of that information
22 for the spill response, et cetera. So there --
23 there was a times quite intense pressure to -- to
24 come up with the best answer that we could, given
25 the data available.

00158:01 Q. There's also pressure, was there not, to
02 generate flow rates quickly?

03 A. Con -- yes, consistent with, you know,
04 the data that were available and scientific
05 rigor, yes.
06 Q. And, in fact, your -- your charge, your
07 two primary functions, one was to come up with
08 a -- with a -- an estimate almost immediately,
09 correct?
10 A. It was come up with an estimate as soon
11 as possible.

Page 158:24 to 159:06

00158:24 Q. Was the FRTG concerned that because of
25 pressure, it would -- it would be forced to
00159:01 generate flow rate estimates that might later
02 prove to be inaccurate instead of waiting for all
03 the data to become available, instead of waiting
04 for all the time it would take to analyze those
05 data, that it would generate acc -- estimates
06 that were not their best estimate?

Page 159:08 to 160:17

00159:08 A. I think the -- the record shows,
09 especially in -- in communications among Plume
10 Team Members, that some Members were less
11 comfortable, in fact, in -- early on especially
12 very uncomfortable, with trying to produce an
13 estimate when they didn't feel that they had the
14 correct data in hand that would allow them to
15 make an estimate.
16 And in my experience working in science,
17 Scientists would always like to have more time
18 and -- and more analyses and better data and
19 larger datasets. But in a -- in a spill response
20 situation like that, it just isn't always
21 possible.
22 Q. (By Mr. Roman) Was it just Plume Team
23 Members that expressed concerns about releasing
24 flow rate estimates before all the information
25 was available and had been thoroughly analyzed?
00160:01 A. I'm -- I'm in -- I'm thinking through
02 each of the Teams. Well, I believe that -- well,
03 at least in the case of also the Mass Balance
04 Team, they initially collected some data that
05 they thought was going to be useful. There was
06 requests for, "What does that data tell you," but
07 the first round of AVRIS was not suitable for
08 doing an estimate. So they said, "We can't do
09 this. We have to fly again."
10 So during that type of an incident, I am
11 sure that they -- they felt pressure to come up
12 with a number, but as Scientists, they said, "We
13 can't use the data at hand."

14 Q. Would you agree that there was
15 substantial pressure on the FRTG from the Obama
16 Administration to develop flow rate estimates
17 quickly?

Page 160:19 to 161:08

00160:19 A. If I might ask, "from the Obama
20 Administration," can -- can you clarify who you
21 mean or what you mean?
22 Q. Well, let's start with the President
23 himself.
24 A. Okay.
25 Q. Did you feel pressure from
00161:01 President Obama to develop flow rate estimates --
02 flow rate estimates quickly?
03 A. No. I know of no communications directly
04 from the President with any of our FRTG Teams or
05 Subteams.
06 Q. Well, how about communications from
07 persons communicating -- or -- or speaking on
08 behalf of the President?

Page 161:10 to 164:14

00161:10 A. Well, I -- I believe that in the very
11 beginning, or near the beginning of the incident,
12 there were communications with White House
13 Officials who expressed the importance of the
14 work of the FRTG, the importance of having
15 information to respond quickly to the -- to the
16 spill. And I would say that the people working
17 on -- on the flow rate very much understood that
18 the -- the National Incident Command, the
19 American public were looking for information as
20 soon as possible.
21 Q. (By Mr. Roman) Who were the White House
22 Officials who expressed the importance of work of
23 the FRTG and the importance of having information
24 to respond quickly to the spill?
25 A. I believe one of them would have been
00162:01 Kate Moran from the Office of Science and
02 Technology Policy.
03 Q. Who else?
04 A. I believe that there was an early
05 communication with former EPA Administrator -- is
06 it Browner? I'm drawing a blank on --
07 Q. Carol Browner?
08 A. Carol Browner, I believe, at one point
09 early on may have also had some communications
10 that were --
11 Q. Do you recall Ms. Browner's title?
12 A. She's -- at that time? At that time, she
13 was a high level person in Administration in the

14 Environmental arena.
 15 (Exhibit No. 8820 marked.)
 16 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
 17 what's been marked as 8820, which is Tab 16 in
 18 the notebooks. (Tendering.)
 19 A. Thank you.
 20 Q. Have you seen this document before?
 21 A. Let me take a look and see. (Reviewing
 22 document.) Yes, I have.
 23 Q. Exhibit --
 24 THE COURT REPORTER: 8820.
 25 Q. (By Mr. Roman) -- 8820 is an E-mail
 00163:01 chain. The top one is an E-mail from Mr. Espina
 02 to Mr. Lehr and others, dated May 21, 2010,
 03 correct?
 04 A. Correct.
 05 Q. Okay. I'd like to focus your attention,
 06 please -- I'm sorry.
 07 Mr. Espina was a Member of the Plume
 08 Team?
 09 A. Yes.
 10 Q. And all of the recipients of this E-mail
 11 were Members of the Plume Team?
 12 A. (Reviewing document.) From those where I
 13 can see their actual name. I -- I don't
 14 recognize that last E-Mail, "pete@gso...", but --
 15 Q. But you recognize the other recipients as
 16 Members of the Plume Team?
 17 A. Yes.
 18 Q. I'll direct your attention to the E-mail
 19 at the bottom of the first page, the May 21,
 20 2010, 5:00 p.m., E-mail from Mr. Lehr to
 21 Mister --
 22 (Discussion off the record.)
 23 Q. (By Mr. Roman) -- Lasheras or
 24 "Lash-a-rus."
 25 Do you see that?
 00164:01 A. Yes, I do.
 02 Q. And I'm directing your attention to the
 03 third paragraph where Mr. Lehr writes: "The
 04 National Incident Command, and quite frankly, the
 05 President, are demanding a new estimate this
 06 weekend."
 07 Do you see that?
 08 A. I do.
 09 Q. And do you understand that Mr. Lehr was
 10 referring to a flow rate estimate, correct?
 11 A. That's my interpretation, yes.
 12 Q. And do you know why the President wanted
 13 a new flow rate estimate that weekend in May of
 14 2010?

Page 164:17 to 164:21

00164:17 A. You know, I can't actually speak to why

18 Dr. Lehr used that particular wording, but I do
19 know that Dr. Lehr never spoke directly with the
20 President. Beyond that, I'm not sure why he used
21 this terminology.

Page 165:07 to 165:10

00165:07 Q. (By Mr. Roman) Would you -- are you
08 aware -- well, would you agree that the President
09 was interested in flow rate estimates from the
10 very beginning of the FRTG's work?

Page 165:12 to 166:18

00165:12 A. Yeah. From a personal standpoint, having
13 seen the President on television talking about
14 wanting to know what's happening and getting
15 information on what's happening, yeah, I -- I
16 think it's fair to say the President was
17 interested to know how much oil was flowing in
18 the -- in the Gulf.

19 Q. (By Mr. Roman) Going up to the
20 next-to-the top E-mail, Mr. Espina writes to
21 Mr. Lehr, in the second paragraph: "Bill: I can
22 only imagine the pressure that you are under at
23 this time."

24 Do you see that?

25 A. I do.

00166:01 Q. Would you agree that all FRTG Members
02 were under pressure from the President and
03 elsewhere to generate flow rate estimates as
04 quickly as possible right from the beginning of
05 the group's formation?

06 A. Well, the Flow Rate Technical Group was
07 chartered by the National Incident Command. It
08 was done at the request of Admiral Allen. And I
09 think it was very clear from the beginning that
10 we were doing this for Admiral Allen. We weren't
11 doing it for the President.

12 I think it is fair to say that every --
13 every Member of the Teams -- you know, I
14 shouldn't go that broadly -- all of the Team
15 Leads, the Subteam Leads that I dealt with, were
16 very aware of the -- the interest and the need
17 for estimates as soon as it could be, you know,
18 scientifically derived.

Page 168:02 to 168:06

00168:02 Q. (By Mr. Roman) I'm handing you,
03 Mr. Sogge, what's been marked as Exhibit 8821,
04 which is also Tab 18, and ask if you've seen this
05 document before?

06 (Exhibit No. 8821 marked.)

Page 168:11 to 168:15

00168:11 Q. Okay. Let's start -- well, actually,
 12 let's go to the top. This is an E-mail from
 13 Mr. Lehr to Ms. McNutt, dated, at least the top
 14 one, May 26, 2010, at 1:04 p.m. Do you see that?
 15 A. I do.

Page 169:08 to 170:01

00169:08 Q. (By Mr. Roman) Okay. Let's go down to
 09 the bottom E-mail, the one from Ms. McNutt to
 10 Mr. Lehr, the "Subject" "Exciting News."
 11 A. M-h'm.
 12 Q. Do you see that?
 13 A. I do.
 14 Q. And the E-mail begins: "Guess what,
 15 team. The White House is so exited about our
 16 work that they want us" -- "to make us the LEAD
 17 story -- "news story, TOMORROW."
 18 Do you see that?
 19 A. Yes.
 20 Q. And then if you look at the top, Mr. Lehr
 21 sends an E-mail to Ms. McNutt and copies the
 22 Plume Team Members and says: It is wise not "to
 23 keep the President of the United States waiting."
 24 Do you see that?
 25 A. Oh, yes, I do. I'm sorry. First
 00170:01 paragraph.

Page 172:16 to 174:20

00172:16 (Exhibit No. 8822 marked.)
 17 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
 18 what's been marked as --
 19 MS. RODGERS: 8822.
 20 Q. (By Mr. Roman) -- 8822, which is also Tab
 21 19.
 22 (Tendering.)
 23 Have you seen this document before?
 24 A. Let me review for a moment, if I may.
 25 Q. Sure.
 00173:01 A. (Reviewing document.)
 02 Yes, I have seen this before.
 03 Q. Exhibit 8822 is an E-mail chain, the top
 04 entry of which is an E-mail from Franklin Shaffer
 05 to his colleagues at the Department of Energy,
 06 correct?
 07 A. Correct.
 08 Q. And Mr. Shaffer was a Member of the Plume
 09 Team?

10 A. Yes.
 11 Q. Okay. Directing your attention to the
 12 third E-mail, the one dated June 9th, 2010, at
 13 9:42 a.m. from Mr. Shaffer --
 14 A. Correct. Yep.
 15 Q. -- and he writes -- well, strike that.
 16 Mr. Shaffer worked for the Department of
 17 Energy at the National Energy Technology
 18 Laboratory, correct?
 19 A. Yeah.
 20 Q. And this E-mail was sent to his
 21 colleagues at -- at that laboratory, correct?
 22 A. To four -- it looks like four of his
 23 colleagues, yes.
 24 Q. Okay. And he writes Mr. Mehrdad --
 25 that's M-e-h-r-d-a-d --
 00174:01 A. M-h'm.
 02 Q. -- one of those colleagues: "As you are
 03 writing your sections of our report, I want to
 04 reiterate that we are being asked to do a 'best
 05 estimate' by the deadline imposed on us by the
 06 White House. We are NOT doing the kind of
 07 engineering analysis that we are used to."
 08 Do you see that?
 09 A. M-h'm.
 10 Q. And this is in the context, was it not,
 11 of the -- of the -- the riser cut shortly before
 12 then, shortly before June 9th?
 13 A. June 9th would have been the day before
 14 the June 10th estimate, yeah --
 15 Q. Okay.
 16 A. -- which followed the -- the riser being
 17 cut.
 18 Q. Okay. And do you have an understanding
 19 of why the White House wanted the -- the estimate
 20 at that time?

Page 174:23 to 175:02

00174:23 A. I don't -- I don't know why they wanted
 24 it that particular time, if indeed they did. I
 25 know from conversations with the Plume Team Lead
 00175:01 they also did not have any direct communications
 02 with the White House.

Page 175:09 to 176:16

00175:09 Q. But you're not disputing that the White
 10 House was, indeed, interested and did, indeed,
 11 want a best estimate by -- by a certain date or
 12 time?
 13 A. I know from -- from communications from
 14 conversations with people that the White House
 15 was interested in updated information, but in

16 terms of for a particular time, I don't know that
17 that there was a driver for a particular date.

18 Q. And do you have an understanding of why
19 the White House did not want to await an
20 Engineering analysis by the Group?

21 A. My personal sense of this gets -- gets
22 back to, I think, something I mentioned earlier,
23 that Scientists would always like to have longer
24 to analyze a problem, more information to be
25 based on the most fine scale measurements. When
00176:01 I worked for the U.S. Army Corps of Engineers and
02 worked alongside of a lot of Engineers, I found
03 that they had very much the same attitude; in
04 fact, even perhaps more so than Scientists.
05 They're used to dealing with certainties, very
06 little with uncertainties. So that that's --
07 that what he's referring to.

08 This is just not going to be able to have
09 the -- the luxury of the time and the amount
10 of -- of known information that they might in
11 some of their normal work.

12 Q. And which would make the -- the estimates
13 they were providing more uncertain, correct?

14 A. It would certainly make them -- at least
15 preliminary, until they got better -- more and
16 better information, yeah.

Page 177:04 to 177:22

00177:04 Q. (By Mr. Roman) Now, the FRTG did, in
05 fact, issue an updated report the next day, did
06 it not?

07 A. June 10th. Correct.

08 Q. Do you know if it would have done so on
09 June 10th if not for the deadline imposed by the
10 White House?

11 A. Well, even within the Team, there was
12 interest in getting a new number out, because
13 they had been new data, the better video
14 available from the post-riser cut much improved
15 over what they had before, and I think that they
16 were eager to put out an updated number based on
17 new information.

18 I don't know whether it would have been
19 on -- exactly on June 10th or -- or whenever, but
20 these were folks who were working pretty
21 furiously, and I think they -- they really wanted
22 to get their -- I don't know, their job done.

Page 180:01 to 180:15

00180:01 (Exhibit No. 8824 marked.)

02 Q. (By Mr. Roman) I'll direct your attention
03 to the last page of the exhibit, which is a

04 continuation of an E-mail from Marcia McNutt to
05 the Plume Team. On the last page, in the
06 third-to-the-last paragraph, she writes: "I have
07 been instructed by the White House to 'fold in'
08 the results of Secretary Chu's analysis with the
09 results of the FRTG to ensure that there is still
10 just one federal assessment of flow."
11 Do you see that?
12 A. I do.
13 Q. Now, first of all, Secretary Chu was and
14 is the Secretary of Energy?
15 A. Yes.

Page 181:20 to 182:04

00181:20 Q. What did you -- what do you understand
21 the directive to be? What was the FRTG being
22 asked to do?
23 A. Well, from -- from this point on pretty
24 much, and we were taking into account that we now
25 had another estimate, another independent
00182:01 estimate, of what the flow rate may be, and we
02 needed to think about that, incorporate that into
03 our -- our considerations, just as we were doing
04 for the FRTG Teams.

Page 183:22 to 184:05

00183:22 It was true, was it not, that the FRTG
23 recognized the importance of having a single flow
24 rate estimate made public and used for internal
25 purposes?
00184:01 A. They certainly rec -- we certainly
02 recognized the importance of having an estimate
03 that was given as a range with our best
04 assessment of the upper and lower bounds,
05 definitely.

Page 184:12 to 184:25

00184:12 A. I -- I, personally, you know --
13 personally, I don't know if the White House would
14 have been displeased with there being multiple
15 estimates, but I do know that from a standpoint
16 of a spill response, which is what Admiral Allen
17 had -- had asked us to do, that was the FRTG
18 Charter, having a range to use when planning
19 number of boats, containment, you know,
20 dispersants, whatever, that was what was of
21 value, and -- and that's what we strove for.
22 Q. (By Mr. Roman) Right. But it was Admiral
23 Allen who wanted the FRTG to be the voice or to
24 be the -- the -- the arbiter of the estimates,

25 correct?

Page 185:02 to 186:10

00185:02 Q. (By Mr. Roman) To be the one making the
 03 announcements of the estimates?
 04 MR. BENSON: Objection, form, scope.
 05 A. I haven't seen -- I haven't seen -- and
 06 in speaking with Admiral Allen, he didn't phrase
 07 it that way. He was looking for, in essence,
 08 one -- when he established the FRTG, he was
 09 looking for an interagency effort, and, in
 10 essence, one set of feedback, back to him, for
 11 his response purposes.
 12 Q. (By Mr. Roman) Do you know what, if
 13 anything, the FRTG did in response to
 14 Ms. McNutt's E-mail to the Plume Team on June 9th
 15 of 2010?
 16 A. May I take a moment to read through this?
 17 Q. Sure.
 18 A. (Reviewing document.) All right. Well,
 19 I note -- I note a couple of things on which I --
 20 I'm -- I'm basing my answer.
 21 This was an E-mail from June 9th, and
 22 June 10th was -- you know, the very next day was
 23 the press release for the update of the Flow Rate
 24 Technical Group. And I do not believe that
 25 that -- the Department of Energy data were used
 00186:01 for that particular estimate.
 02 However, it set the stage for the meeting
 03 that was June 14th, in Washington, D.C., bringing
 04 together people from the FRTG, and the Department
 05 of Energy, to work on this concept of a -- a, you
 06 know, single best estimate at that time.
 07 Q. And that was reflected in the June
 08 15th --
 09 A. June 15th, correct --
 10 Q. -- estimate?

Page 187:18 to 187:21

00187:18 Q. Right. Did the White -- was the White
 19 House solely interested in source control, or did
 20 they -- did the White House have other interests,
 21 as well?

Page 187:24 to 189:13

00187:24 A. The only context in which I've heard
 25 White House pressure was with regard to -- or
 00188:01 interest, I should say, was with regard to
 02 getting an estimate in -- and in terms of
 03 response.

04 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
 05 what's been marked as Exhibit 8824, which can --
 06 I'm sorry, which can also be found at Exhib -- at
 07 Tab 21. Have you seen this document before?
 08 A. Let me please take a look through and
 09 I'll know better. (Reviewing document.) I don't
 10 recall having seen this document before.
 11 Q. Exhibit 8824 is an E-mail chain. The top
 12 E-mail is from Secretary Salazar to Ms. McNutt,
 13 dated June 13, 2010, at 5:58 p.m., correct?
 14 A. Yes.
 15 MR. ROMAN: No.
 16 Q. (By Mr. Roman) Secretary Zal -- Salazar
 17 was and is the Secretary of the Interior?
 18 A. Yes.
 19 Q. Secretary Chu is also recipient of this
 20 E-mail?
 21 A. I'm assuming that's what S -- assuming
 22 "SCHU" is that, yes.
 23 Q. Okay.
 24 A. Oh, there it is. Yes. I see.
 25 Q. Direct your attention to that top E-mail,
 00189:01 Secretary Salazar writes to Secretary Chu:
 02 "Unless" -- this is, I think, the third sentence:
 03 "Unless it is an insurmountable issue, we need to
 04 arrive at a Federal number tomorrow night."
 05 Do you see that?
 06 A. I do.
 07 Q. Do you know to what Secretary Salazar was
 08 referring by a Federal number?
 09 A. I believe he was talking about a -- in
 10 essence, a consensus range based on information
 11 he had at that time.
 12 Q. The consensus flow -- flow rate range?
 13 A. Correct.

Page 189:22 to 190:20

00189:22 Q. (By Mr. Roman) Mr. Sog -- Sogge, I'm
 23 handing you what's been marked as Exhibit 8825,
 24 which is Tab 22. Have you seen this document
 25 before?
 00190:01 A. (Reviewing document.) I don't believe
 02 so.
 03 Q. Exhibit 8825 is an E-mail dated June 13
 04 from Pedro Espina to Patrick Gallagher. Do you
 05 see that?
 06 A. I do.
 07 Q. And who are Mr. Espina and Mr. Gallagher?
 08 A. Well, Espina is a Member of the Plume
 09 Team. And Gallagher, I'm sorry, I'm not -- I'm
 10 not recognizing right at the moment.
 11 Q. Directing your attention to the fourth
 12 line of the E-mail, the first full sentence
 13 reads: "The President ordered that

14 'one result'" -- and "one result" is in
15 quotes -- "be reported to the public and no leaks
16 to the press."
17 Do you see that?
18 A. I do.
19 Q. Do you know why the President ordered
20 that one result be reported to the public?

Page 190:22 to 190:23

00190:22 Q. (By Mr. Roman) And that no leaks -- and
23 that no leaks be made to the press?

Page 191:01 to 191:07

00191:01 A. I -- I don't -- well, I don't know who
02 characterized it. In reading this E-mail there's
03 several people referenced, so I'm not sure who
04 may have characterized to Mr. Espina in the
05 President's order, but I do know that the
06 President didn't directly contact Members of the,
07 you know, of the FRTG.

Page 191:20 to 192:17

00191:20 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
21 what's been marked as Exhibit 8826, which is at
22 Tab 26 in the notebook. I take it you've seen
23 this one before I put it in front of you?
24 A. This one I have.
25 Q. The top E-mail in this chain is an E-mail
00192:01 from you to Mr. Ratzel that you sent to him on or
02 about July 29th, 2010, correct?
03 A. Correct.
04 Q. In the first paragraph you write, this is
05 starting the second line: "...a precise
06 consensus flow rate estimate is now needed by the
07 end of the day." Do you see that?
08 A. Yes, I do.
09 Q. And was this because there was a flow
10 rate meeting the next day, July 30th of 2010?
11 A. Correct.
12 Q. Did anybody tell you that a precise
13 consensus flow rate estimate was needed in
14 advance of that meeting?
15 A. That -- yeah, that -- that -- it was --
16 blah, sorry. That is what had been related to
17 me.

Page 193:05 to 194:11

00193:05 Q. Do you recall why you needed -- I -- I
06 mean -- strike that.

07 Do you recall whether, in fact, the FRTG
 08 did, in fact, come up with a precise consensus
 09 flow rate estimate by the end of July 29th?

10 MR. BENSON: Objection, scope.

11 A. Yeah. May I describe the process?

12 Q. (By Mr. Roman) Absolutely.

13 A. Initially, you know, we -- we had called
 14 for a meeting on July 30th and 31st, actually,
 15 initially, on July 30th, to be able to talk
 16 about -- to get Presentations from each of the
 17 Subteams, to talk about where we -- how we
 18 derived the various estimates.

19 And then I recall getting -- getting word
 20 that while the expectation was beyond just
 21 providing sort of a report on what each of us had
 22 done, what each of the Teams had done, but
 23 instead to try to come up with a -- a point
 24 estimate.

25 I believe that that was something being
 00194:01 emphasized by Dr. Tom Hunter of DOE, though I
 02 don't believe Dr. Hunter relayed that to me
 03 directly. I had very few direct communications
 04 with him.

05 So we met, then, on the 30th and had the
 06 Presentations and things. And by the end of the
 07 30th, I don't think literally we had formally
 08 agreed upon the suitability of that curve that's
 09 in Figure 6, in that flow over time curve. I
 10 believe that kind of formally that occurred the
 11 following morning, on the -- on the 31st.

Page 194:13 to 195:24

00194:13 Q. (By Mr. Roman) I'll hand you what's been
 14 marked as Exhibit 8827, which is at Tab 27 of the
 15 notebook, and ask if you've seen this document
 16 before?

17 A. I believe so.

18 Q. Are these your notes?

19 A. Yes, they are.

20 Q. And they're your notes taken from that
 21 flow meeting on July 30th, 2010?

22 A. Yes.

23 Q. And you prepared these notes
 24 contemporaneously with that meeting?

25 A. Yes, I believe -- I believe so.

00195:01 Q. And you did so in the ordinary course of
 02 business?

03 A. Yeah.

04 Q. That was part of your responsibilities to
 05 make such notes?

06 A. Actually, it wasn't -- wasn't a -- a
 07 standard responsibility for me to make such
 08 notes. It just -- in some cases it was helpful
 09 for me to do so.

10 Q. Part of your practice?
11 A. In many cases, yeah.
12 Q. And this is the meeting to which you were
13 referring in your July 29 E-mail that we were
14 just discussing in connection with Exhibit 8826?
15 A. Yes.
16 Q. Where did this meeting take place?
17 A. In the BP Headquarters in Houston.
18 Q. How long did the meeting last? Was it
19 two days or just July 30th?
20 A. Well, the main bulk of the meeting was on
21 the 30th, and I believe some of us regrouped
22 on -- on the 31st.
23 Q. Okay. Focusing first on July 30th, how
24 long did that meeting last?

Page 196:08 to 197:20

00196:08 A. I can't recall the exact hours, but it
09 was the bulk of the day.
10 Q. (By Mr. Roman) And who was there?
11 A. A variety of Representatives. Some were
12 there in person, some were by phone.
13 Q. Well, you were there, Ms. McNutt was
14 there?
15 A. I'm trying to actually recall whether
16 Dr. McNutt was here, or whether she had been
17 called away to -- to some other duty. I guess I
18 would say the -- the Lead on this meeting, in
19 terms of functioning, was Tom Hunter.
20 Q. And were all four FRTG Teams represented
21 at this meeting?
22 A. I don't recall if the Mass Balance Team
23 Lead was there. Again, they'd wrapped up their
24 work and -- and such, but we had Representatives
25 from the Plume Team, the Nodal, and the Reservoir
00197:01 Team. Not all in person. Many -- many people
02 joined this meeting by phone.
03 Q. Okay. And what was the purpose of the
04 meeting?
05 A. The -- the purpose, I -- I -- and it
06 actually followed the structure, was for each of
07 the Teams, including Teams that were not FRTG,
08 for example, Woods Hole, and the DOE Tri-Labs
09 Team, to present what they'd done in their
10 analyses and to go over their techniques, their
11 assumptions, and their results, so that everybody
12 had a common understanding of how the different
13 Teams arrived at their numbers. And then, if it
14 was going to be possible, to agree on a -- a
15 consensus flow rate estimate, range, or whatever.
16 Q. Okay. By the way, the -- these notes
17 accurately reflect the substance of the meeting,
18 do they not?
19 A. Within the bounds of my ability to word

20 process and pay attention at the same time.

Page 199:07 to 200:07

00199:07 Mr. Sogge, do these notes that I've
 08 marked as Exhibit 8827 reflect just the meeting
 09 on July 30th, or does it also reflect the meeting
 10 on July 31st -- do they also reflect?
 11 A. (Reviewing document.) I believe that
 12 these reflect just the 30th, based on some --
 13 some of the terminology, and some of the -- what
 14 I've written on the last page.
 15 Q. Okay. We were looking at, right before
 16 we broke, at that last block of notes that began
 17 with "Rod (Chief of Staff)." And I believe that
 18 you said that you did not -- you were uncertain
 19 whether Rod was Secretary Chu or
 20 Secretary Salazar's Chief of Staff.
 21 Do -- do you see the reference to "Rod"?
 22 A. Yes, I do.
 23 Q. And "Rod" -- or you -- you quote
 24 paraphrase "Rod" as saying: "Something will go
 25 out tomorrow (probably around 60k)..."
 00200:01 Do you see that?
 02 A. I do.
 03 Q. And that's in reference to 60,000 barrels
 04 per day?
 05 A. Yes.
 06 Q. Do you recall what the basis was for an
 07 estimate of 60,000 barrels per day?

Page 200:12 to 202:09

00200:12 A. From my memory, the -- the 60K refers to,
 13 you know, approximately what the starting flow
 14 rate may have been.
 15 Q. (By Mr. Roman) And do you recall why that
 16 was being released, that 60,000 barrels per
 17 day -- per day estimate was being released on
 18 July 31st of 2010?
 19 A. At the time, the well had been, in
 20 essence, capped by this time, and so no flow had
 21 been going into the Gulf, and there were
 22 increasing calls from the media and lots of
 23 interest by the public of, "So, what was the
 24 rate?" So I believe it was in response to that.
 25 Q. You see below that where it says "Tom"?
 00201:01 A. Yes, the next paragraph.
 02 Q. And that refers to Mr. Hunter?
 03 A. Yes.
 04 Q. And Mr. Hunter writes: "Let's use a
 05 range 53-63k."
 06 Do you see that?
 07 A. Yes.

08 Q. And "Bill" --
 09 Is that Mr. Lehr?
 10 A. That would be Bill Lehr, yes.
 11 Q. -- writes: "That would work."
 12 A. (Nodding.)
 13 Q. And then Mr. Hunter goes: "Why not just
 14 go with 60k?"
 15 Do you see that?
 16 A. I do.
 17 Q. And Secretary Chu says: "Lets meet
 18 tomorrow at 1:00 Eastern, and decide where we
 19 are."
 20 Do you see that?
 21 A. I do.
 22 Q. And Marcia says: "Good idea. We can
 23 also say that it has changed over time from a
 24 number near 60 to a number near 50" and then, in
 25 brackets, "[due to depletion]."
 00202:01 Do you see that?
 02 A. Correct.
 03 Q. Why did you put the "[due to depletion]"
 04 in brackets?
 05 A. A parenthetical note about why it would
 06 have changed over time.
 07 Q. It strikes me, as -- as an outsider here,
 08 that this -- this is like a negotiation. Am I
 09 missing -- is -- am I missing something?

Page 202:11 to 203:04

00202:11 A. Let -- let me comment that these are very
 12 truncated notes. These are very abbreviated
 13 notes, so --
 14 Q. (By Mr. Roman) Sure.
 15 A. Yeah, this literally isn't a back and
 16 a -- you know, sort of a ping-pong back and forth
 17 in this kind of a language. So these were the
 18 concepts that -- that were put out.
 19 I don't know if I would characterize this
 20 as a negotiation where you're, say, going from
 21 high to low. It was more a -- a question that
 22 especially Tom Hunter posed at the end of saying:
 23 "Based on everything that you have seen today,"
 24 and he's posing this to the -- the collective
 25 group of Scientists that are around the table,
 00203:01 "is an estimate of this nature scientifically
 02 supportable, and justifiable?" Do they feel
 03 professionally that they can support that number
 04 and they can buy off on that number?

Page 207:04 to 208:01

00207:04 Q. (By Mr. Roman) Okay. Let's go to the
 05 July 31 meeting.

06 A. Oh, okay.
07 Q. Who was at that meeting?
08 A. The July 31 was just a quick followup
09 meeting. I believe that we had most of the
10 people who were present on -- on July 31st --
11 excuse me, on July 30th, but I'm -- seem to
12 recall that not everyone was -- was -- on the
13 Teams were there.
14 Q. And this also took place at BP in
15 Houston, with folks calling in?
16 A. Yes. In fact, that one may very well
17 have been a -- a total phone, a virtual meeting,
18 yeah.
19 Q. How long did it last?
20 A. I believe it was scheduled for about an
21 hour.
22 Q. Is that how long it took?
23 A. To my recollection, yeah.
24 Q. And you -- you said there was a quick
25 followup, following up on what?
00208:01 A. I think on the idea --

Page 208:07 to 210:15

00208:07 A. Yeah. I recall it being to the concepts
08 that were put forward at the end of my -- excuse
09 me, in my notes in 8827 about the ranges of
10 numbers and how the estimate might come out.
11 Q. (By Mr. Roman) Do you recall what was
12 said at this meeting?
13 A. Paraphrasing, I seem to recall Tom Hunter
14 giving everyone an opportunity to speak up again
15 about whether they -- they had any concerns about
16 the numbers that they were talking about for
17 that -- that final flow rate graph, and just
18 making sure that people felt comfortable with
19 that.
20 That was his stated purpose at the end of
21 the 30th was have people have a chance to think
22 about it overnight. He was -- he was very
23 concerned about, you know, this -- the
24 people's -- people feeling comfortable as
25 Scientists with those kinds of numbers.
00209:01 Q. Do you recall anyone expressing
02 discomfort either on July 30th or July 31st with
03 the graph?
04 A. No, I don't. H'm. I could look through
05 my notes and see for sure, if you'd like.
06 Q. Yes, please.
07 A. (Reviewing document.)
08 (Discussion off the record.)
09 (Exhibit No. 8828 marked.)
10 A. The notes has -- has reminded -- these
11 notes have reminded me that there was a -- there
12 were a lot of discussions about some of the

13 assumptions each Team had used. I don't know
 14 that I would characterize those as concerns.
 15 There was also the sort of classic scientific
 16 questioning back and forth about, "Well, you
 17 know, is this number consistent with what you've
 18 seen," et cetera.

19 At the end -- by the end of the
 20 conversation on the 31st, I don't recall there
 21 being any objections to the ultimate number that
 22 they arrived at.

23 Q. (By Mr. Roman) So in the entire two days,
 24 you don't recall anyone expressing any concerns
 25 about the graph that was ultimately used as
 00210:01 Figure 6 in the FRTG Final Report?

02 A. Well, I guess I would say I recall there
 03 being scientific -- scientific questions, you
 04 know, back and forth by the reviewers, and by
 05 the -- you know, "What did you use for this
 06 pressure or whatever," those kind of those
 07 various things.

08 Where I think, in particular, especially
 09 after reading this, there was a questions about,
 10 "Are we trying to estimate what the flow was now
 11 versus what the flow was in the beginning," and
 12 things such as that.

13 But I think, in general, by the end,
 14 everybody was comfortable with -- with what the
 15 graph was.

Page 211:02 to 211:12

00211:02 When you say that everyone agreed with
 03 the graph -- graph, what did you mean?

04 A. The -- the flow pattern of starting at
 05 62,000, decreasing, a slight increase when the
 06 riser was cut, and then decreasing again to the
 07 53,000.

08 Q. So are you referring to the shape or the
 09 actual numbers or both?

10 A. Both.

11 Q. And no one expressed disagreement with
 12 even -- with any of the numbers at all?

Page 211:14 to 212:08

00211:14 A. Again, there were -- I -- I guess -- I
 15 guess it depends on what you mean by
 16 "disagreement." During the course of the day,
 17 people were asking questions about each other's
 18 techniques, and things such as that.

19 I think there might have been a "show me"
 20 type attitude on some people about, "Is it
 21 justified to be at the upper end," especially
 22 because for some of the Teams, that was higher

23 than what their Team might have come. So there
 24 were conversations probably like that.
 25 Q. (By Mr. Roman) But you believe that, in
 00212:01 the end, everyone's concerns had been addressed
 02 and that everybody -- every FRTG Member agreed
 03 with the numbers that are set forth in the Final
 04 Report?
 05 A. I believe they're comfortable with it.
 06 I -- I checked back afterwards with -- with folks
 07 to make sure.
 08 Q. So literally, not one dissenting voice?

Page 212:10 to 221:21

00212:10 A. Again, by the time that the meeting was
 11 over, to my knowledge, the Team Leads were --
 12 were comfortable with that graph.
 13 Q. (By Mr. Roman) So this is only the Team
 14 Leads that were discussing this, as opposed to
 15 the entire membership?
 16 A. Not every Member of every Team was on the
 17 phone call. For example, the Department of
 18 Energy had 20-some people, you know, from the
 19 Nodal analysis, they weren't all on the call.
 20 Q. I'm handing you what's been marked as
 21 Exhibit 8828, which is Tab 29 in the notebook.
 22 Have you seen this document before?
 23 A. I don't believe so, but let me read it
 24 here. (Reviewing document.)
 25 I don't recall if I've seen this exact
 00213:01 number, but I -- I know that Dr. McNutt and I at
 02 least discussed this -- this opinion of
 03 Congressman Markey.
 04 Q. Well, first of all, Exhibit 8828 is an
 05 E-mail, dated July 19, 2010, from Ms. McNutt to
 06 Mr. Hunter, correct?
 07 A. Correct.
 08 Q. And the E-mail begins with: "Was just on
 09 the phone with Congressman Markey. He is
 10 FIXATED" -- "FIXATED" is in all caps -- "on flow
 11 rate and very upset that the well may not go back
 12 to full production because he really wants to
 13 know" -- and then in full caps -- "THE NUMBER for
 14 what the flow rate is" -- and then with parens --
 15 "(even though I keep trying to tell him that
 16 there really isn't one number)," close parens.
 17 End of reading.
 18 Do you see that?
 19 A. I do.
 20 Q. Now, were you aware of Congressman
 21 Markey's interest in the FRTG's flow rate
 22 estimates?
 23 A. I was in a general sense, yes.
 24 Q. Do you know why Congressman Markey was
 25 interested in the FRTG's flow rate estimates?

00214:01 A. My understanding was that he -- in -- in
02 the times that I saw him in the media, in -- on
03 the news occasionally, he seemed to be talking
04 about the importance of knowing what was actually
05 spilling into the Gulf. My understanding is that
06 he had an expectation at some point there would
07 be total collection, you know, via surface
08 vessels, and that was going to be the
09 measurement.

10 And I think when that became clear that
11 they were going to leave the -- the -- the valves
12 closed and that they weren't ever going to a
13 point of complete collection on the surface,
14 that's -- that's I believe the origin of his
15 interest here.

16 Q. Now, Congressman Markey was not the only
17 Senator or Representative who was seeking flow
18 rate information, correct?

19 A. I don't know. He may be the only -- I
20 believe he's the only Congress -- specific
21 Congressmen I can recall that -- but given --
22 given the interest by the States and their
23 Representatives probably not the only one who was
24 interested.

25 (Exhibit No. 8829 marked.)

00215:01 Q. (By Mr. Roman) So there was -- there was
02 also interest among State Representatives,
03 particularly in the Gulf Region?

04 A. Right. There was a regular Governors'
05 call -- I believe it every Friday -- where
06 Admiral Allen or someone would update them.

07 Q. I'm handing you what's been marked as
08 Exhibit 8829, which can be found at Tab 30 in
09 your notebooks, and ask you if you've seen this
10 document before.

11 (Tendering.)

12 Please leave 8828 --

13 A. Oh.

14 Q. -- out.

15 A. Okay.

16 (Reviewing document.)

17 Q. Have you seen 8829 before?

18 A. I don't believe I've seen this exact
19 E-mail, no.

20 Q. 8829 is an E-mail from Ms. McNutt to
21 Mr. Hunter, dated July 21, 2010, correct?

22 A. Correct.

23 Q. Do you directing your attention to
24 Paragraph 3, or the sentence that begins with the
25 "3," Ms. McNutt writes: "Congressman Markey and
00216:01 others have become increasingly insistent that we
02 produce a better estimate than the current
03 35-60,000 barrels per day."

04 Do you see that?

05 A. I do, Item 3.

06 Q. Right. Do you know who the "others"
07 were, besides Congressman Markey?
08 A. I don't know specifics, no.
09 Q. Do you know why Congressman Markey and
10 the others deemed 35,000 to 60,000 barrels per
11 day, that estimate to be inadequate?
12 A. Based on -- on my conversations with
13 Dr. McNutt at the time, he was having some of the
14 challenges that -- that many people in the public
15 have of understanding the idea of a range and
16 being comfortable with a range, which is
17 scientifically valid but sometimes hard for
18 people to -- to understand. I think he was
19 looking for an exact number, so --
20 Q. And Ms. McNutt kept telling him that
21 there isn't just one number, correct?
22 A. That from the work that we've been doing,
23 the modeling and the measurements, that we were
24 not generating at that point just one number.
25 Q. Ms. McNutt ever tell that to the
00217:01 President?
02 A. I don't believe Director McNutt ever
03 spoke directly to the President, to my knowledge.
04 Q. Do you recall whether Dr. McNutt ever
05 conveyed that message directly or indirectly to
06 the President?
07 A. I'm sorry. Which -- which message?
08 Q. That there wasn't going to be just one
09 number.
10 A. The communications I am familiar with and
11 in conversation with Dr. McNutt, I think we knew
12 that the -- she knew that the Flow Rate Technical
13 Group was going to be coming out with -- with
14 estimates that would most likely be ranges.
15 (Exhibit No. 8830 marked.)
16 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
17 what's been marked as Exhibit 8830, which can be
18 found at Tab 31.
19 (Tendering.)
20 Have you seen what's been marked as
21 Exhibit 8830 before?
22 A. Yes.
23 Q. Are these notes that you took of a July
24 28, 2010 flow rate reconciliation --
25 reconciliation meeting conference call?
00218:01 A. Yes.
02 Q. And you prepared these notes
03 contemporaneously with that meeting/call in the
04 ordinary course of business?
05 A. Well, in the -- in the course of this
06 meeting, I did. I just want to reiterate
07 something I said before. It wasn't my
08 responsibility necessarily to take notes in all
09 FRTG meetings or any of the meetings I went into.
10 But, yeah, I took this then.

11 Q. It was -- it was something that you did
12 in the -- in the course of your -- in the
13 furtherance of your job responsibilities,
14 correct?

15 A. I did this on this particular day
16 during -- during that meeting as part of my role.

17 Q. And you did so contemporaneously with the
18 meeting and call?

19 A. I believe so.

20 Q. Was this a meeting or a call or -- or a
21 combination as before, where you had a meeting
22 with some people and others calling in?

23 A. It looks like it's a conference call.

24 Q. Okay. And why do you call it the "Flow
25 Rate Reconciliation Meeting"? Why is that the
00219:01 title of the document?

02 A. I would need -- well, the general topic
03 is the intent -- is the upcoming meeting for the
04 flow rate reconciliation, and this is a
05 conference call about that upcoming meeting.

06 Q. Okay. And --

07 A. Yes.

08 Q. -- by flow rate reconciliation, are you
09 referring to reconciling the various estimates
10 that were out there, both within the FRTG and the
11 Department of Energy, to come up with a single
12 estimate?

13 A. I'm referring to the July 30th and 31st
14 meeting, where everybody was going to be
15 presenting their -- their modeling results and
16 then coming together with a -- with a Government
17 estimate.

18 Q. A single Government estimate?

19 A. If that was possible.

20 Q. Do you recall how long this call lasted?

21 A. No, I do not.

22 Q. Do you recall who participated?

23 A. The participants are listed at the top.

24 Q. That would be the obvious place to look.

25 Do these notes accurately reflect the
00220:01 substance of the call?

02 A. In general and in summary, yes.

03 Q. Do you recall anything about the call
04 that was -- that is not captured in these notes?

05 A. To answer that, I'll need to take a
06 moment to review the notes.

07 Q. Sure.

08 A. (Reviewing document.)

09 I don't remember any meeting content
10 beyond what's -- what's in here.

11 Q. I'll direct your attention to the top of
12 the second page, where Ms. McNutt is quoted as
13 saying -- or is paraphrased as saying:
14 "Congressman Markey has been pushing this very
15 hard."

16 Do you see that?
 17 A. I do.
 18 Q. Do you recall what Congressman Markey was
 19 pushing very hard at this point?
 20 A. I believe this refers to the -- the
 21 earlier exhibit where he was looking for a
 22 number.
 23 Q. Do you recall what, if anything, the
 24 FRTG -- FRTG did in response to Congressman --
 25 Congressman Markey's prodding?
 00221:01 A. I don't believe that the FRTG did
 02 anything in response to that. I mean, at -- in
 03 the beginning part of this memo, I think it
 04 illustrates Dr. McNutt's general -- general
 05 position on this, that in the first paragraph,
 06 about the fourth line down, third or fourth line
 07 down, two things: "If we issue a new number, it
 08 should be...absolutely defensible..."
 09 And then the following line: "...thinks
 10 that we can not ever" necessarily "say there is A
 11 number for the flow rate;" that "there were
 12 probably multiple rates over time due
 13 to...changes, wellhead...etc."
 14 So I think to me this illustrates,
 15 really, the general approach that Dr. McNutt had
 16 the whole time, which is, you know, the
 17 scientific credibility of this has to be sound.
 18 Q. Okay. So if -- if I can just quickly
 19 summarize here: You agree that there was
 20 pressure on the FR -- FRTG from the
 21 Administration, correct?

Page 221:23 to 222:04

00221:23 A. My experience --
 24 Q. (By Mr. Roman) Let me start again.
 25 A. Okay.
 00222:01 Q. You agree that there's -- there's
 02 pressure on the FRTG from the Administration to
 03 generate flow rate estimates as quickly as
 04 possible?

Page 222:06 to 223:24

00222:06 A. Yeah. I would say that we were very
 07 aware that there was interest by -- by the
 08 public, by the media, and -- and by the
 09 Administration, by the Incident Command, to
 10 provide information as soon as we could.
 11 Q. (By Mr. Roman) And that also included
 12 Congress and State Legislators?
 13 A. I guess I would say common sense would
 14 suggest so, though I think that was something I
 15 was less aware of, because I was focused -- you

16 know, the -- the FRTG Teams, we were really
17 focused pretty much on the National Incident
18 Command and such.

19 Q. Would you agree that all members of the
20 FRTG were aware of the interest by the public, by
21 the media, and by the Incident Command to provide
22 information as soon as the FRTG could?

23 MR. BENSON: Object to the form.

24 A. I would certainly say that we relayed the
25 information -- Dr. McNutt and I relayed the
00223:01 information to the Team Leads, and I believe the
02 Team Leads, from my conversation with them, made
03 their Team Members very aware that -- that this
04 was something that needed to be a priority.

05 Q. (By Mr. Roman) Would you agree that this
06 pressure on the FRTG was constant throughout the
07 period -- the active period of the FRTG's work
08 from late May of 2010 until it issued its -- the
09 press release on August 2nd, 2010?

10 A. I guess I'll -- I'll say we were -- we
11 were aware -- there -- there was always, I
12 believe, an awareness that information's needed,
13 that estimates were needed, estimates were
14 desired. There was huge part.

15 Q. So --

16 A. Con -- constant's harder for me to -- to
17 know what you mean by "constant."

18 Q. Would you agree that the pressure was
19 intense?

20 A. Yes, I -- I would say so.

21 Q. Would you agree that Member -- that the
22 FRTG tried to respond to these pressures by
23 developing flow rate estimates as quickly as
24 possible?

Page 224:01 to 224:23

00224:01 A. My experience, the -- the Members of the
02 Flow Rate Technical Group, the Team Leads and
03 those folks, just did -- did an amazing job of
04 working very quickly, using whatever the best
05 data they had on hand, and getting estimates out
06 as quickly as they could consistent with their
07 scientific credibility. They really did. It was
08 an amazing thing to watch.

09 Q. (By Mr. Roman) Would you agree that
10 Members of the FRTG were concerned about the
11 accuracy of the estimates they were producing
12 given the time pressures that they were under?

13 A. Yeah. Yes. I -- I believe that the --
14 that was a concern for all the Scientists
15 involved was to have scientifically reliable
16 numbers. The -- these are professionals, many of
17 them the foremost people in their field, and I
18 think that they very much wanted to be sure that

19 what they did was scientifically sound.
20 Q. In fact, some FRTG Members stated that
21 because of time constraints their conclusions
22 should not be viewed as the products of
23 scientific analysis, did they not?

Page 224:25 to 229:15

00224:25 A. I recall there being communications of
00225:01 Scientists expressing concerns about being pushed
02 for information based on some of the early video
03 data. I think there were several times that
04 there were E-mails exchanged about feeling that
05 they would like to have more time to analyze.
06 And the Team Lead sometimes saying, "Well, we
07 wish it were, but in the reality of a response,
08 you always got that."

09 I don't recall anyone stating the exact
10 words you used in -- in framing that question.

11 (Exhibit No. 8831 marked.)

12 Q. (By Mr. Roman) Let me show you,
13 Mr. Sogge, what's been marked as Exhibit 8831,
14 which can be found at Tab 34 in the notebooks.

15 (Tendering.)

16 Have you seen this document before?

17 A. Let me take a look, please.

18 (Reviewing document.)

19 Yes, I have.

20 Q. Okay. Exhibit 8831 is an E-mail from
21 Franklin Shaffer, or at least the top entry is an
22 E-mail from Franklin Shaffer to -- who is
23 "savas@newton.berkeley.edu,"? Do you know? Omer
24 Savis, Ms. Rodgers tells me?

25 A. Correct.

00226:01 Q. Okay. Who is Ms. Sav -- who is
02 Mr. Savas, or Dr. Savas?

03 A. Dr. Savas is one of the people who
04 worked -- whoops, excuse me, I'm sorry. I need
05 to -- pardon me. My cold is catching up with me.

06 Dr. Savas is one of the Scientists who
07 was involved on the -- the Plume Team analysis.

08 Q. Plume Team. Okay.

09 And Mr. Shaffer was also on the Plume
10 Team?

11 A. Yes.

12 Q. So I'm sorry. This is an E-mail from
13 Mr. Shaffer to Mr. Savas, dated June 8, 2010,
14 correct, or at least the top one is?

15 A. Yes.

16 Q. Okay. I'll direct your attention to the
17 third page. There's an E-mail from Mr. Shaffer
18 to Mr. Lehr, which at least in the second
19 paragraph states: "Please correct me if I am
20 wrong, but this team was assembled to 'do an
21 independent scientific analysis of the amount of

22 oil leaking from the BP oil spill.' But this
23 Team is now being used to quickly generate
24 numbers on which national policy of the U.S.
25 government is being implemented at the highest
00227:01 levels, on the fly."
02 Do you see that?
03 A. I do.
04 Q. On Page 2 of the E-mail chain,
05 Mr. Shaffer writes -- and this is the first full
06 paragraph that begins "Again," the third sentence
07 reads: "We have not been able to get a data
08 sample upon which to do any kind of scientific
09 analysis."
10 Do you see that?
11 A. No. I'm sorry. Where? Oh, near the
12 top. Yes, I do see that.
13 Q. Are you aware of those concerns expressed
14 by Mr. Shaffer?
15 A. Yes. This fits within, I think what I
16 was describing earlier, about discomfort by some
17 Scientists wanting to have more time, better data
18 to base their analysis on.
19 Q. Do you know whether Dr. McNutt viewed
20 Mr. Shaffer's concerns as valid?
21 A. I think Dr. McNutt recognized that the
22 Team was being asked to perform very quickly, and
23 I think that she recognized that they would
24 like -- she acknowledges in -- in -- I think
25 multiple E-mails, including even this one, I
00228:01 believe, that it would be -- on the -- on the
02 second page, there's some wording from her, that
03 it would be nice to have more time or data, but
04 that isn't the reality of this, in terms of
05 during a -- a crisis response period.
06 Q. Did you have a view as to whether or not
07 Mr. Shaffer had a legitimate basis for his
08 concerns?
09 A. In terms of my technical expertise, I
10 don't know.
11 (Exhibit No. 8832 marked.)
12 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
13 what's been marked as Exhibit 8832, which can be
14 found at Tab 35. Have you seen this document
15 before?
16 A. (Reviewing document.) Please let me
17 review it for a moment. Yes, I have seen this.
18 Q. Exhibit 8832, at least the top entry, is
19 an E-mail dated May 26, 2010, from Ms. McNutt to
20 Mr. Lasheras, correct?
21 A. Correct.
22 Q. And I'd like to direct your attention to
23 the second E-mail at the bottom of the first
24 page, and in particular, to the second paragraph
25 which Mr. Lasheras writes to Dr. McNutt, starting
00229:01 with the second sentence: "Of course, one can

02 always assume the worst-case scenario-100% oil
 03 being continuously discharged" -- and then in
 04 parenthesis -- "(as Steve Wereley has publically
 05 done in the press and in Congress)" -- close
 06 parens -- "and arrive at an upper bound. I will
 07 personally consider this not only unscientific
 08 but also imprudent and reckless, given the poor
 09 quality and short time records we have analyzed."
 10 Do you see that?
 11 A. I do.
 12 Q. Now, were Mr. Shaffer and Mr. Lasheras
 13 the only FRTG Members to express concerns about
 14 the scientific basis, or -- or lack thereof, of
 15 the FRTG estimates?

Page 229:17 to 230:23

00229:17 A. They aren't the only Scientists to object
 18 and have concerns about the pace at which they
 19 were having to work, the quality of data,
 20 especially the original video data from BP, and
 21 things such as that. I don't believe that they
 22 were the only two.
 23 Q. (By Mr. Roman) Who -- who else do you
 24 recall having expressed concerns about -- who
 25 have expressed such concerns?
 00230:01 A. Well, Dr. McNutt expressed concerns about
 02 the quality of the original data, and I'm trying
 03 to recall the author of an early E-mail after the
 04 first data we received, the first video data of
 05 the plume received. I'm sorry. I can't recall
 06 who the author was on that one.
 07 Q. And do you recall whether Dr. McNutt
 08 believed that BP was responsible for the poor
 09 quality of the original data used by the FRTG?
 10 A. Was responsible?
 11 Q. Was to blame?
 12 A. Was to blame? I -- I guess I -- I don't
 13 know if I would use the word "blame." BP was the
 14 provider of that data, so I believe she thought
 15 it was their responsibility to provide the
 16 best -- the best data that they had.
 17 Q. Do you -- do you recall whether
 18 Ms. McNutt believed that BP had not provided the
 19 best data that it had?
 20 A. I don't recall her ever making that
 21 statement to me. I think she made a few
 22 statements about being surprised if that was the
 23 best data that -- that BP had on hand.

Page 231:03 to 231:12

00231:03 (Exhibit No. 8833 marked.)
 04 Q. (By Mr. Roman) Mr. Sogge, I'm handing you

05 what's been marked as Exhibit 8833, which is --
06 can be found at Tab 36. Exhibit -- have -- have
07 you seen -- I'm -- I'm -- my questions are
08 actually going to focus on the attachment, which
09 has the -- bears the heading "OIL SPILL
10 WORKSTREAMS AND PRIORITIES."
11 Do you see that?
12 A. Yes.

Page 231:25 to 232:17

00231:25 Q. Okay. Exhibit 8833 begins with an E-mail
00232:01 from Marcia McNutt to Anne Castle dated May 30,
02 2010, correct?
03 A. Correct.
04 Q. Who is Ms. Castle?
05 A. She's the Assistant Secretary of Interior
06 for Water and Science.
07 Q. Okay. And what is the attachment? What
08 is this "OIL SPILL WORKSTREAMS AND PRIORITIES"?
09 A. It appears to be a summary of the
10 various -- some of the efforts that are going on,
11 who's the lead responsible person, who's staffing
12 it, and in some cases, perhaps -- I guess I don't
13 see many timelines. There are no timelines. It
14 almost seems to be the type of thing that we
15 would call kind of swim lane explanation. What's
16 in whose swim lane. Who -- who's dealing with
17 what.

Page 232:25 to 234:24

00232:25 Q. Directing your attention to Paragraph
00233:01 3.c.
02 A. Of the attachment?
03 Q. Of the attachment, yes.
04 A. (Nodding.) Okay.
05 Q. Starting with the second sentence, which
06 reads: "The report issued on May 27 stated that
07 this information was to be used to inform the
08 ongoing response effort and that other uses of
09 the estimates are not valid. Several scientists
10 relied on a representation that this work would
11 not be used for Natural Resources Damage
12 Assessment."
13 Do you see that?
14 A. I do.
15 Q. First of all, do you know what is meant
16 by "Natural Resources Damage Assessment"?
17 A. I do now, yes.
18 Q. And what is that?
19 A. In a general sense, I mean -- I mean,
20 it's a process, I guess, to determine the
21 penalties associated with impacts from an event.

22 Q. For example, including damages in this
 23 case?
 24 A. Yes, I believe so, yeah.
 25 Q. Do you know why Scientists expressed
 00234:01 concern about their work being used for Natural
 02 Resources Damage Assessment?
 03 A. Well, especially given the -- the timing
 04 of this, which is early on in the response, the
 05 Flow Rate Technical Group Subteams were really
 06 just being formed or were beginning to work
 07 together, and Dr. Lehr was explicit, he -- he
 08 explained to us, and you see it in the E-mail
 09 chains, he was explicit to the people that he was
 10 asking to come onboard, that this was about
 11 response.
 12 And I think that was -- that was -- well,
 13 not I think, that was definitely something that
 14 he repeated many times, is this is about aiding
 15 the response. And he was not asking these people
 16 to become involved in something that was geared
 17 toward litigation, these were academic
 18 professionals. This was about responding to the
 19 needs of the Nation at this time.
 20 You -- you see that not only in the --
 21 I'm sorry. You see that not only in the May 27th
 22 Report, you know, you see it in the Final --
 23 their Final Report, as well, reiterated several
 24 times.

Page 235:22 to 236:24

00235:22 Q. Exhibit 8834 is an E-mail chain, the
 23 first of which is an E-mail from Ms. McNutt to
 24 several, well, Government Officials, including at
 25 least a couple from the U.S. Coast Guard,
 00236:01 correct?
 02 A. Correct. The -- the first being Bill
 03 Grawe. He was one of our primary contacts at the
 04 National Incident Command.
 05 Q. And -- and she sent this E-mail on or
 06 about June 6 of 2010, correct?
 07 A. Correct.
 08 Q. Looking at that first E-mail starting
 09 with the third sentence, Ms. McNutt writes: "I
 10 definitely agree with the sentiment of the"
 11 offer -- "authors that are there many documents
 12 that we have all prepared for our own planning
 13 purposes that we would not like widely
 14 distributed because they have not been as
 15 thoroughly vetted as we would normally like given
 16 the scrutiny that we are all under. At the same
 17 time, I do get concerned that the time scale for
 18 decision-making is not always in synch with the
 19 norms for proper review for formal science and
 20 engineering studies. Therefore, it is" -- "it is

21 of value to have something you can work from
22 while the scientific process plays out."
23 Do you see that?
24 A. I do.

Page 237:13 to 237:16

00237:13 It is not the FRTG's position, is it,
14 that its initial estimates, the ones given on May
15 27th, on June 10, on June 15, represent -- are --
16 are correct estimates?

Page 237:19 to 238:05

00237:19 A. My -- my sense and my interpretation from
20 working with the Team Leads is that they
21 considered those the best estimate and
22 scientifically defensible based on the
23 information that it had in -- in many cases
24 caveated with particular assumptions and
25 recognizing that they were going to be updated if
00238:01 new information became available.
02 Q. (By Mr. Roman) I'm asking as of today, is
03 there any FRTG Member who believes that the
04 estimates released by the FRTG on May 27th, 2010
05 are accurate?

Page 238:09 to 238:16

00238:09 A. Yeah. I don't -- I don't know as of --
10 as of today. I know that as each estimate was
11 released, you know, the Teams had consensus on
12 it.
13 Q. (By Mr. Roman) So you think that there
14 may be some FRTG Members who believe that the
15 estimates released by the FRTG on May 27th are
16 accurate?

Page 238:19 to 239:12

00238:19 A. Those initial estimates turned out to be
20 below the lower bounds of -- of what was
21 measured, so I think that they would say those
22 numbers were no longer the best numbers. I -- I
23 guess I was interpreting what you're saying is
24 that they would feel that their analysis was
25 in -- was incorrect.
00239:01 Q. (By Mr. Roman) I -- I was asking about
02 the estimates.
03 A. All right.
04 Q. As a matter of fact, you said that every
05 FRTG Member agreed with the estimates that were
06 incorporated in the FRTG's Final Report, correct?

07 A. Right. The Teams were -- the Teams
08 were -- yeah, they did.
09 Q. Therefore, by definition, every FRTG
10 Member believes that the estimates provided by
11 the FRTG on May 27th, on June 10th, and June 15th
12 are no longer valid?

Page 239:15 to 240:08

00239:15 A. From a personal perspective, I actually
16 haven't talked to and can't speak for every FRTG
17 Member. And the numbers that were released on
18 June 15th, actually those numbers, the -- the
19 ultimate, I guess, DOE driven numbers at -- at
20 the end, where the DOE and the FRTG came
21 together, those fall within that range of 35 to
22 60, so I guess I wouldn't consider those as being
23 invalid, the June 15th estimate.
24 Q. (By Mr. Roman) Let's first go back. When
25 you say you don't speak on behalf -- or you
00240:01 haven't spoken to every FRTG Member, let's limit
02 it, then, to the FRTG -- TG Team Leads and to
03 Dr. McNutt.
04 A. Okay.
05 Q. Okay. Do you know of any of them who
06 believes today that the estimates provided by the
07 FRTG on May 27th, on June 10th, and on June 15th,
08 are accurate -- are accurate?

Page 240:11 to 240:23

00240:11 A. Yeah. I'm trying to answer, you know,
12 correctly and adequately here.
13 I think all of them will stand behind
14 that they -- that they produced the best
15 estimates that they could at that time with the
16 data they had. I think they will recognize that
17 subsequent analyses and sometimes things --
18 events such as collection, suggests that the --
19 especially the May 27th, the June 10th estimates
20 were not all within the range of -- of what we
21 believed to be the final number.
22 The June 15th numbers, some of those
23 fall within the range.

Page 241:06 to 241:06

00241:06 (Exhibit No. 8835 marked.)

Page 241:11 to 243:15

00241:11 Q. (By Mr. Roman) Back on the record.
12 Mr. Sogge, I've handed you what's been

13 marked as Exhibit 8835, which is Tab 38 in the
14 notebook. I take it you've seen Exhibit 8835
15 before?
16 A. I have.
17 Q. 8835 begins with an E-mail that you wrote
18 to Mr. Hammond on or about July 30, 2010,
19 correct?
20 A. Correct.
21 Q. Who is Mr. Hammond?
22 A. Steve Hammond is a USGS employee who, at
23 this time, was serving as our -- I guess I would
24 say our liaison with the National Incident
25 Command Office in Washington, D.C.
00242:01 Q. In the -- and you say -- the E-mail says,
02 "Hi Steve" and "Sky."
03 Who is Sky?
04 A. That would be Sky Bristol. He's also a
05 USGS employee.
06 Q. What was his role?
07 A. He's based with our Denver kind of
08 Computer Technology section, and he was assisting
09 the U.S. Coast Guard in developing a -- a
10 Web-based tool for their daily accounting of oil
11 skimmed and burned, and things such as that.
12 That -- that -- that's the oil budget being
13 referring to here.
14 Q. In this E-mail, you wrote Mr. Hammond and
15 Mr. Bristol: "I did not mean to imply a single
16 value as the final endpoint. More likely, a
17 consensus value plus/minus some percentage which
18 still ends up with a range. Presenting only a
19 single number would imply more precision than we
20 can justify."
21 Do you see that?
22 A. I do.
23 Q. What did you mean by a "consensus value
24 plus/minus some percentage"?
25 A. This E-mail -- for context, this E-mail
00243:01 was written following that first day of meeting
02 between the Department of Energy Tri-Lab's folks
03 and the -- the FRTG representatives and others.
04 And so this is referring to the idea that
05 there wasn't just going to be some single number
06 that the Coast Guard could use as a daily flow
07 rate throughout the entire event. It was most
08 likely going to be some number or some -- you
09 know, some changing number with that range. And
10 when I say "percentage," that represents the
11 range, the balance on that number.
12 Q. Now, when the FRTG announced its final
13 flow rate estimates on August 2nd 2010, three
14 days later, it did, in fact, publicly announce
15 just a single number, did it not?

00243:17 A. It publicly announced a single number for
18 the cumulative flow rate, for the cumulative
19 number of barrels released. That's not what I
20 was referring to in this document.

21 Q. (By Mr. Roman) Right. But at no point in
22 the August 2nd, 2010 press release -- and feel
23 free to refer to Exhibit 8809, if you would
24 like -- did you give different numbers for
25 different stages, correct, or even ranges?

00244:01 A. This would have been which date?

Page 244:03 to 244:06

00244:03 Q. (By Mr. Roman) August 2nd, 2010.

04 A. And if I may refresh my memory and look
05 at the --

06 Q. Sure. 8809.

Page 244:10 to 245:07

00244:10 A. I'm looking for that. (Reviewing
11 document.) The -- I believe I understood your
12 question.
13 The press release, actually, in -- in the
14 first couple of paragraphs, does describe how the
15 flow began at 62,000 barrels of oil per day and
16 decreased over the 87 days. The 53,000 barrels
17 of oil per day were -- was the value for
18 immediately prec -- you know, preceding its
19 closing via the capping stack.

20 Q. (By Mr. Roman) Fair enough. It was your
21 view then, and it is your view now, that
22 presenting only a single number would imply more
23 precision than the FRTG could justify, correct?

24 A. Presenting a single point for daily flow,
25 yes.

00245:01 Q. And even on a day-by-day basis, there was
02 a range, was there not, you know, of an
03 uncertainty, in your view, of plus or minus 10
04 percent?

05 A. Correct. As -- as shown in that
06 Figure 6, for every day there is a range.

07 Q. And that's Figure 6 --

Page 245:11 to 245:16

00245:11 Q. (By Mr. Roman) Okay. And Figure 6,
12 you're talking about Figure 6 in the Final
13 Report?

14 A. Right. That was the Figure 6 of the Flow
15 Rate Technical Group Report.

16 (Exhibit No. 8836 marked.)

Page 245:22 to 246:01

00245:22 Q. Exhibit 8836 is an E-mail chain. The
23 first E-mail is from -- or the last E-mail, or
24 the top E-mail is from Mr. Shaffer to Mr. Leifer
25 and others dated June 7, 2010, correct?
00246:01 A. Correct.

Page 246:25 to 247:18

00246:25 Q. (By Mr. Roman) Okay. Directing your
00247:01 attention to the fourth paragraph of that E-mail,
02 Mr. Shaffer writes: "The Plume Team was then
03 asked to achieve a consensus that our best
04 estimate of the oil leak rate was" 20 "to 34000"
05 barrels per day, "or numbers in that range.
06 Marcia McNutt also asked the team if it would be
07 appropriate to report to the Secretary of Energy
08 that the Plume Team had achieved 'surprising
09 consensus' on the numbers of" two -- "20000 to
10 34000" barrels per day.
11 "I feel that I should state that I did
12 not agree that these numbers be attributed to the
13 Plume Analysis Team. Again, I did not agree to a
14 consensus on these, or any" -- "or any other
15 numbers, for the Plume Team's estimate of the
16 maximum oil rate leaking from the BP site."
17 Do you see that?
18 A. I do.

Page 248:02 to 249:19

00248:02 Do you know whether others expressed
03 concerns about an estimate of 20,000 to 34,000
04 barrels per day around June 7th of 2010?
05 A. I -- I do not.
06 Q. Do you know whether Members of other
07 Teams, other than the Plume Team, expressed
08 concerns about the estimates that they were being
09 asked to provide?
10 A. Within the Flow Rate Technical Group?
11 Q. Yes.
12 A. None -- none that come to mind, other
13 than just some of the general questions that they
14 all had about the -- the independence of their
15 results and were they using the same formulas and
16 things such as that.
17 Q. I don't understand what you mean by
18 "independence of their results"?
19 A. Well, I think especially on the Plume
20 Team, there was interest in recognizing that the
21 different analyses were coming up with different
22 numbers.

23 Q. So the Plume Team wanted the FRTG to
24 include in its flow rate estimates not just a
25 consensus number, but also the components --
00249:01 the -- the Subteam results or the Subteam
02 estimates as context for the -- for the consensus
03 number?

04 A. Well, within the final Plume Team Report,
05 the Scientists wanted to make sure that each of
06 their individual analyses was presented. That's
07 what I'm referring to. And if you look at their
08 report, there are Appendices for each --
09 Appendices or Chapters for each of them.

10 Q. So within the Plume Team, there was --
11 there was variance in the estimates?

12 A. Yes, among the -- among the different
13 calculation methods, yeah.

14 Q. And how many different estimations did
15 the Plume Team Members make? How many separate
16 estimates were there?

17 A. They would be easy to count in looking at
18 the Plume Team Report itself, the final Plume
19 Team Report, but I seem to recall six or eight.

Page 256:09 to 257:11

00256:09 Q. Did the FRTG stop its work at the same
10 time that -- that the well was capped?

11 A. No.

12 Q. Why did they continue?

13 A. Well, among other reasons, we were now
14 switching into a mode, as described in the Final
15 Report, where we wanted to do a "Lessons
16 Learned," you know, what have we -- what can we
17 learn about these different techniques and how
18 they performed against a benchmark, which we did
19 not yet have. So I think they were -- we were
20 still looking to make sure we completed whatever
21 we needed that way.

22 Q. Did the FRTG get any different
23 directions, told to slow down its analysis, speed
24 up its analysis, do anything different after the
25 well was capped?

00257:01 A. Well, I think we all felt an obligation
02 to follow through with what we were given the
03 charter for, to provide that -- that final
04 estimate.

05 From a practical standpoint, I think by
06 the time we realized that the well was, indeed,
07 going to be remained closed, because that wasn't
08 evident necessarily on the 15th, yeah, I think we
09 all realized that maybe we have a little bit more
10 breathing room here, and people could stop
11 working 18-hour days.

Page 257:19 to 259:21

00257:19 Q. Were there any communications involving
20 the FRTG or among Members of the FRTG about the
21 implications of the well-being capped on the
22 FRTG's work going forward?
23 A. I don't recall any specifics, but I would
24 suspect so, yeah.
25 Q. But you don't recall anything about
00258:01 those?
02 A. Well, I know that I relayed information
03 to the Team Leads that "The well is capped and --
04 and looks like we might be able to have a little
05 bit more breathing room." I don't recall if that
06 was E-mail or by phone.
07 Q. Okay. Do you recall anything, other
08 than -- other than that maybe the deadlines
09 aren't as urgent as they were originally, do you
10 recall anything being different or any
11 communications about the FRTG's working different
12 now that the well was capped?
13 A. Well, there were some questions about
14 with the well capped, you know, what is the
15 purpose of the FRTG's Group estimates and such.
16 Q. Who raised those questions?
17 A. I believe Bill Lehr, among others.
18 Q. To whom did he raise them?
19 A. I know he raised them in at least -- at
20 least once in a conversation. In fact, it might
21 have even been part of that -- it may have been
22 part of that June 30th meeting.
23 Q. June 30th or July 30th?
24 A. I'm sorry. Thank you. July 30th.
25 Q. And do you recall who -- to whom did he
00259:01 make the question?
02 A. I don't recall. Yeah, I don't recall a
03 specific individual.
04 Q. Do you recall what the answer was?
05 A. No. I think -- what I recall it as being
06 is part of the -- sort of the general discussion,
07 just -- even in terms of like the purpose of the
08 meeting and such.
09 Q. Would that exchange be reflected in your
10 notes of that meeting -- conf -- conference call?
11 A. Yeah, it may be.
12 Q. Do you want to refresh -- see if your
13 notes refresh your recollection?
14 A. Do you remember what exhibit number that
15 one -- that was?
16 Q. 88 something.
17 (Laughter.)
18 MS. RODGERS: Exhibit 8827.
19 THE WITNESS: Thank you.
20 MS. RODGERS: M-h'm.
21 A. (Reviewing document.)

Page 259:25 to 260:04

00259:25 A. Yeah, I do find reference to it in -- oh,
 00260:01 I'm sorry.
 02 Q. (By Mr. Roman) I'm sorry. Please.
 03 A. I do find reference to it in my notes, on
 04 Page 3 of Exhibit 8827.

Page 260:12 to 261:18

00260:12 Q. (By Mr. Roman) Where is it exactly?
 13 A. It would be about seven lines down, where
 14 it says "Bill Lehr: So what is the value of doing
 15 a new estimate."
 16 Q. And Ms. McNutt responded: "It is for the
 17 oil budget"?
 18 A. Correct.
 19 Q. And what was the oil budget?
 20 A. The oil -- there's two meanings of oil
 21 budget at that time that we working. One is the
 22 daily oil budget that the Coast Guard was
 23 keeping, you know, the amount that was being
 24 skimmed and et cetera.
 25 And the other would be for the -- the
 00261:01 report that came out. I think it was titled,
 02 "The Fate of the Oil." It was not a FRTG report,
 03 but they were using the numbers that DOE and FRTG
 04 agreed to.
 05 Q. So the FRTG flow rate estimates were used
 06 in preparing the oil budget?
 07 A. I guess I would say that the joint, you
 08 know, estimate from the FRTG and the Department
 09 of Energy. The results of that July 30th and
 10 31st meeting.
 11 Q. Mr. Lehr responds, after Ms. McNutt says,
 12 "It is for the oil budget," by saying: "Then our
 13 model is already oversimplified because of other
 14 factors." And then you write: "Given these
 15 precisions, he thinks a good flow rate number is
 16 50k."
 17 Do you see that?
 18 A. Right.

Page 262:16 to 262:18

00262:16 Q. (By Mr. Roman) Do you know whether he
 17 objected when the Final Report included flow rate
 18 numbers above 50,000 barrels per day?

Page 262:20 to 262:22

00262:20 A. No, I am not aware of any -- he agreed,
 21 along with all the other Team Leads, that they

22 were comfortable with that, that estimate.

Page 264:13 to 265:06

00264:13 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
 14 what's been marked as Exhibit 8839 --
 15 A. Thank you.
 16 Q. -- which can be found at Tab 42.
 17 (Tendering.)
 18 A. (Reviewing document.)
 19 Q. I take it you've seen 8839 before?
 20 A. I have.
 21 Q. These are more of your Daily Notes?
 22 A. They are.
 23 Q. And as with the earlier notes, you
 24 prepared these -- these notes contemporaneously
 25 on the date -- on the date indicated on the page?
 00265:01 A. Yes.
 02 Q. And you did so contemporaneously with --
 03 well, I'm sorry.
 04 You did so in the ordinary course of
 05 business in furtherance of your responsibilities
 06 at the FRTG?

Page 265:08 to 268:02

00265:08 A. At this point, I had transitioned back to
 09 working both on my normal job, as well as
 10 following up with the Flow Rate Technical Group
 11 Final Report. So this -- this would have been
 12 done in that context, yeah.
 13 Q. (By Mr. Roman) But you did this -- you
 14 did -- you made these notes in connection with
 15 your work -- with your continuing work with the
 16 FRTG, correct?
 17 A. Yes. Yes.
 18 Q. Okay. Directing your attention to your
 19 notes of Wednesday, September 15th, 2010 --
 20 A. M-h'm.
 21 Q. -- which is I believe the third page of
 22 the document.
 23 A. (Nodding.)
 24 I'm sorry.
 25 Q. Do you have that in front of you?
 00266:01 A. I'm sorry. I had the wrong date. That
 02 was September 15th, yes, I do.
 03 Q. Okay. Can you please read where it
 04 says -- well, the first line says -- well, why
 05 don't you read it. It's your handwriting.
 06 A. The very first line --
 07 Q. Please.
 08 A. -- underneath the -- this was a
 09 conversation with Art Ratzel and Margie Tatro.
 10 Q. And it's a telephone conversation. We

11 know that from the pound sign?
 12 A. Correct.
 13 And so you would like me to read the
 14 first bullet statement?
 15 Q. No. Read the third bullet statement,
 16 please.
 17 A. (Reviewing document.)
 18 It says: The "FRTG report was
 19 'politically correct' in explaining why FRTG
 20 estimates were needed, aside from punitive side."
 21 Q. Okay. What do you mean by "politically
 22 correct"?
 23 A. That would have been a comment by Art
 24 Ratzel, not myself.
 25 Q. Do you know to what Mr. Ratzel was
 00267:01 referring?
 02 A. I'm -- I'm trying to recall the
 03 conversation.
 04 No. No, I'm not sure. He may have been
 05 referring to the -- the fact that we articulated
 06 in the Report that it was about the response and
 07 not about, you know, the punitive or the -- I
 08 don't know what you would call it -- the damage
 09 assessment.
 10 Q. And that's what he was referring to when
 11 he was referring to the punitive side, the
 12 damages to be assessed -- potentially assessed
 13 against BP?
 14 A. I believe so.
 15 Q. And did you believe that the FRTG report
 16 was politically correct in explaining why the --
 17 why its estimates were needed other than for
 18 purposes of this litigation?
 19 A. No. I was just recording his comment on
 20 it as part of being able to keep track that I
 21 had -- I had discussed the Report with him.
 22 Q. Do you know whether it was the -- well,
 23 strike that.
 24 Was it ever the FRTG's intent to have its
 25 estimates used for purposes of calculating
 00268:01 punitive damages against BP?
 02 A. No.

Page 271:23 to 272:01

00271:23 Q. (By Mr. Roman) Was the -- did the
 24 Administration ever convey to the FRTG the
 25 acceptable -- what an acceptable range of
 00272:01 uncertainty would be in its flow rate estimates?

Page 272:03 to 275:03

00272:03 A. I'm not aware of any specific range
 04 given. It was clear that the more that we could

05 reduce the bounds, you -- you know, the upper and
06 lower limits, the more useful the information
07 would be, both for the -- well, for the National
08 Incident Command, for the public to understand
09 it. So if we -- I guess that probably answers
10 your question.

11 MR. ROMAN: Let's go with the next
12 one.

13 (Discussion off the record.)

14 MR. ROMAN: Thank you.

15 (Exhibit No. 8841 marked.)

16 MR. ROMAN: Why don't we go ahead
17 with the next one, too, please.

18 (Exhibit No. 8842 marked.)

19 MS. RODGERS: A separate document?

20 MR. ROMAN: Yes, a separate
21 document.

22 (Discussion off the record.)

23 THE WITNESS: Excuse me.

24 MR. ROMAN: And let's keep going,
25 one more, too, please.

00273:01 (Exhibit No. 8843 marked.)

02 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
03 three documents. The first is 8841, which can be
04 found at Tab 43. The next one is Exhibit 8842,
05 which can be found at Tab 45. And the last is
06 Exhibit 8843, which can be found at Tab 46.

07 A. (Reviewing documents.) Thank you.

08 Q. Okay. Let's take them in order, please.

09 Starting with Exhibit 8841, have you seen
10 this document before?

11 A. No, not to my knowledge.

12 Q. Okay. Exhibit 8841 purports to be "Notes
13 on" a "FRTG Conference Call, July 30, 2010." Do
14 you see that?

15 A. I do.

16 Q. And that's -- we -- we've talked about
17 that conference call, correct?

18 A. Correct.

19 Q. I can represent to you that the Bates
20 number in the lower right-hand corner, where you
21 see "LAL" -- do you see that?

22 A. Yes.

23 Q. -- those are for documents produced by
24 the Los Angeles -- Los Alamos National
25 Laboratory. Does that help identify for you who
00274:01 is notes these might be?

02 A. No, not off the top of my head.

03 Q. Let me suggest someone. Do you know
04 Bruce Robinson?

05 A. No, I don't recall --

06 Q. Okay.

07 A. -- Bruce Robinson.

08 Q. He was an FRTG Member on the Nodal
09 Analysis Team.

10 A. Okay.
11 Q. Okay. Do you know whether Mr. Robinson
12 participated in this call?
13 A. I believe that George Guthrie had several
14 of his Team Members on it. He may very well have
15 been one of them.
16 Q. Okay. Well, let's skip that for now.
17 We'll come back to it.
18 Let's go to 8842. Have you seen this
19 document before?
20 A. No, not to my knowledge.
21 Q. It --
22 A. I must confess I'm not -- oh, okay. I
23 wasn't quite sure what it was.
24 Q. Okay. These appear to be notes of a
25 telephone conversation of the FRTG on July 30th
00275:01 of 2010. Do you see that at the top?
02 A. Yes, I do.
03 Q. Probably the same conversation?

Page 275:06 to 276:13

00275:06 A. It may be, though I'm not sure I could be
07 certain.
08 Q. (By Mr. Roman) I will represent to you
09 that "LBN" in the lower right-hand corner, the
10 Bates identification --
11 A. M-h'm.
12 Q. -- acronym --
13 A. Right.
14 Q. -- is for the Lawrence Berkeley National
15 Laboratory. Does that help you identify whose
16 notes these might be?
17 A. No. I mean, I know that Lawrence
18 Berkeley National Laboratory personnel were on --
19 were on one of the Nodal Analysis Teams, but I
20 don't know what individual it may be.
21 Q. Do you know a Curtis Oldenburg?
22 A. Again, not directly.
23 Q. Okay. Let's turn to Exhibit 8843, which
24 appears to relate to a July 31, 2010 multiteam
25 telephone conference. Do you see that?
00276:01 A. Yes, I do.
02 Q. And do you know whose notes these are?
03 A. I can tell it's from one of the National
04 Labs, but, no, I -- I don't know who specifically
05 there.
06 Q. And the acronym in the -- on the Bates
07 number for this is "PNL," which I'll represent to
08 you is the Pacific Northwest National Labs. Does
09 that help you?
10 A. Again, not in terms of narrowing it to an
11 individual.
12 Q. Okay. Okay. Let's go back to Exhibit
13 8841.

Page 276:16 to 281:08

00276:16 Q. (By Mr. Roman) And to the last page of
17 that exhibit. And you'll see -- whew, how do you
18 describe this -- about halfway down that first
19 big block, where it says, "Chu: why do we want a
20 number?" Do you see that?

21 A. Yes.

22 Q. Okay. And skipping a few sentences, the
23 quotation or the -- or the substance of -- of
24 Secretary Chu's comments -- strike that.

25 The following comments are attributed to
00277:01 Secretary Chu, quote: "Anything below 10%
02 uncertainty is overkill. Time to complete? If
03 getting from 15 to 10% takes a week, that may be
04 too long." Taking -- "Taking weeks and weeks to
05 refine is not acceptable."

06 Do you see that?

07 A. I do.

08 Q. Do you recall Secretary Chu saying
09 anything to that effect during the conversation
10 on -- or meeting on July 30th of 2010?

11 A. Well, I recall that being part of the
12 conversation, and it -- something similar was
13 reflected in my notes. I don't recall if that
14 was Secretary Chu or if it was Tom Hunter.

15 And given that this is a -- a phone
16 conversation, I would probably want to refer to
17 my notes in terms of who I thought it was on the
18 line.

19 Q. Okay. Why don't you do so, please.

20 A. You know what -- Exhibit 8827, the --

21 MS. RODGERS: Exhibit 8827.

22 MR. ROMAN: What tab?

23 MS. RODGERS: 27.

24 MR. ROMAN: That's Tab 27.

25 MS. RODGERS: (Nodding.)

00278:01 A. (Reviewing document.)

02 Yeah. I see. There's a -- a few
03 discrepancies in terms of who things may have
04 been attributed to. For example, the question of
05 why do we want a number, I have that down as
06 being actually something that Bill Lehr brought
07 up.

08 Q. Where are you looking? Is this the last
09 page of your --

10 A. Oh, yes. I'm sorry. On -- on the
11 next-to-the-last page of my notes. That would be
12 page --

13 Q. Next-to-the-last page. All right.

14 A. Page 3.

15 Q. Okay.

16 A. The fifth paragraph down, that says "Bill
17 Lehr," colon.

18 Q. (Nodding.)
19 And what you say is that Mr. Lehr said:
20 "So what is the value of doing a new estimate.
21 It is not for response...it is for liability, we
22 need to go through all of this very carefully."
23 Then Miss -- then Dr. McNutt says: "It is for
24 the oil budget."
25 And then Mister -- Mr. Lehr says: "Then
00279:01 our model is already oversimplified," and we went
02 through this before, correct?
03 A. Right. Although I note that Bill Lehr
04 said: "If it is for liability, we need to go
05 through all of this very carefully." And that
06 seems to be very similar to what is being
07 attributed to Secretary Chu here.
08 Q. And then the next line, there's a -- or
09 in the next paragraph in your notes, there's a
10 reference to Steve. Is that referring to
11 Secretary Chu?
12 A. (Reviewing document.)
13 You know, I can't remember because I --
14 I -- the reason I'm pausing is I notice that I
15 use, you know, Secretary Chu's last name later --
16 later in the narrative.
17 Q. Well, let's look at exhibits -- what were
18 the last two?
19 MS. RODGERS: Exhibit 8842 and 8843.
20 Q. (By Mr. Roman) Well, 8842 and 8843, and
21 see if we can put those together with your notes.
22 A. Okay.
23 Q. On the second page of 8842, on the
24 left-hand side --
25 A. Ah --
00280:01 Q. -- there's a reference to "Chu" -- do you
02 see that?
03 A. Yes.
04 Q. -- and then under "reasons," and it says
05 No. 2, "damages," and it says "~10-20%, they'll
06 settle so detail doesn't matter."
07 Do you see that?
08 A. (Reviewing document.)
09 No. I'm sorry. This is the diagram
10 page?
11 Q. Yes.
12 A. (Reviewing document.)
13 MR. BENSON: (Indicating.)
14 A. Oh, I'm sorry. I was looking up under
15 the heading of "Chu."
16 Yes. I see -- I see that line under
17 Point 2.
18 Q. (By Mr. Roman) Okay. Now, you go back to
19 your notes page -- your notes, page -- you know,
20 Exhibit 8827, Page 3.
21 A. Right.
22 Q. And where it says: "Steve" --

23 A. M-h'm.
24 Q. -- it says: "Regarding damages, we only
25 need 10-20% uncertainty as well."
00281:01 A. Right.
02 Q. Do you see that?
03 A. I do.
04 Q. And so does that con -- does -- does
05 Exhibit 8842 refresh your recollect --
06 recollection that, in fact, it was that the
07 "Steve" on Page 3 of your notes refers to
08 Secretary Chu?

Page 281:14 to 281:18

00281:14 A. It -- it doesn't necessarily refresh my
15 memory, but I see a logical connection.
16 Q. (By Mr. Roman) You believe now, do you
17 not, that the "Steve" on Page 3 of your notes is
18 Secretary Chu?

Page 281:20 to 282:09

00281:20 A. I guess I would say it seems a reasonable
21 conclusion.
22 Q. (By Mr. Roman) Do you know who else
23 "Steve" could be?
24 A. No. But there were a lot of people in
25 that meeting, yeah.
00282:01 Q. Do you recall anyone else being named
02 Steve?
03 A. I know that there -- Steve Wereley, but I
04 don't believe he would have been on there from
05 the Flow Rate Technical Group, but -- no.
06 Q. And do you know why Secretary Chu
07 believed that the Government only needed 10 to
08 cen -- 10 to 20 percent uncertainty for purposes
09 of damages?

Page 282:11 to 282:16

00282:11 A. I don't honestly recall any mention of
12 him with regard to damages.
13 Q. (By Mr. Roman) You don't recall Secretary
14 Chu discussing damages at this meeting on July
15 30th, 2010?
16 A. No.

Page 282:18 to 283:15

00282:18 Q. (By Mr. Roman) Directing your attention
19 to Exhibit 8843, the third page. In the middle
20 of the third page -- well, kind of at the top
21 third, it says: "Uncertainty still being worked

22 out, 1 10% feels better, 1 5% too tight."
 23 Then it continues: 4.9 million barrels 1
 24 10%. And I can't read what follows, but then the
 25 next line is a quote: As far as US Government
 00283:01 negotiations with BP, this is good enough, close
 02 quotes and in parentheses "(Steve)."
 03 Do you see that?
 04 A. M-h'm. I do.
 05 Q. Do you recall any conversation -- well,
 06 first of all, was Mister -- was Secretary Chu
 07 involved in the call on July 31st, 2010?
 08 A. Yes, I believe he was.
 09 Q. And do you recall him saying anything
 10 about the U.S. Government's negotiations with BP?
 11 A. I don't honestly re -- re -- ah. I don't
 12 honestly remember any conversations about it.
 13 Q. Do you recall any conversations with
 14 Secretary Chu about litigation between the U.S.
 15 Government and BP?

Page 283:18 to 284:03

00283:18 A. Not that I recall.
 19 Q. (By Mr. Roman) Do you recall any
 20 conversations with Secretary Chu about the degree
 21 of uncertainty in the FRTG flow rate estimates?
 22 A. I remember conversations about the degree
 23 of uncertainty for this consensus model of going
 24 from 62 to 53. Yeah, I remember that
 25 conversation.
 00284:01 Q. What do you recall about that
 02 conversation?
 03 A. I remember there was a --

Page 284:07 to 285:05

00284:07 A. Yeah. I remember there was a -- a source
 08 of a lot of the conversation. Because Tom Hunter
 09 wanted to make sure that the various Team
 10 Leads -- Subteam Leads, I guess I should say,
 11 felt comfortable with that in terms of their
 12 professional judgment. And that's reflected in
 13 part in some of these notes.
 14 There was -- there was discussion about
 15 whether people felt that a 5 percent, you know,
 16 uncertainty band around that line or whether it
 17 was that too tight a band for the analyses and
 18 the information we had at hand as opposed to,
 19 say, 10 percent.
 20 Q. (By Mr. Roman) And the Group concluded
 21 that 5 percent was too narrow a band, correct?
 22 A. I guess I would say I don't remember any
 23 kind of formal vote on it, but there was not -- I
 24 don't remember anyone pushing forward and saying,

25 "That is the appropriate number that everyone's
00285:01 comfortable with."

02 Q. And at the end, the -- the number that
03 was included in the Report was 10 percent,
04 correct?

05 A. Right, the 10 percent uncertainty.

Page 285:23 to 286:05

00285:23 Q. And you also testified that the FRTG
24 never knew, or at least was never told, that its
25 estimates would be used for purposes of the
00286:01 litigation.

02 Do you recall that testimony?

03 A. Right. That was never -- never part of
04 our Charter and never relayed to us, that I was
05 aware.

Page 287:18 to 287:23

00287:18 Q. (By Mr. Roman) So do you wish to modify
19 your earlier testimony about whether the FRTG's
20 continuing work, after its flow rate analysis --
21 I'm sorry, or that's continuing work after the
22 well was capped was motivated, in part, by the
23 damages assessment against BP?

Page 288:02 to 288:10

00288:02 A. No. I -- I guess I still would not say
03 that the FRTG work, or I guess I would not say
04 that I would change my statement. The Flow Rate
05 Technical Group, both our Charter and our work,
06 as we were doing it, was not intended to be used
07 for -- for damage assessment.

08 Q. (By Mr. Roman) Well, do you agree, that
09 as of July -- at least as of July 30th, 2010,
10 that purpose had changed?

Page 288:12 to 288:18

00288:12 A. No, I would not say that that purpose
13 changed. I'd say that -- that Secretary Chu made
14 a comment that regarding damages, there's a
15 certain percent of uncertainty that would be
16 needed, as well.

17 Q. (By Mr. Roman) And he made this comment
18 at an FRTG flow rate meeting, correct?

Page 288:21 to 289:02

00288:21 A. He made this comment at a Joint Meeting

22 of the Department of Energy and the Flow Rate
23 Technical Group.
24 Q. (By Mr. Roman) And that -- and this
25 meeting ultimately comment -- culminated in the
00289:01 final flow rate estimates that were issued by the
02 FRTG three days later, correct?

Page 289:04 to 289:09

00289:04 A. Well, jointly with the Department of
05 Energy, yes.
06 Q. (By Mr. Roman) And it's still your
07 testimony that the FRTG never knew or was never
08 told that its estimates would be used for
09 purposes of litigation?

Page 289:11 to 290:03

00289:11 A. I don't recall Secretary Chu saying that
12 the FRTG numbers were going to be the basis of
13 litigation --
14 Q. (By Mr. Roman) Well --
15 A. -- even during this meeting.
16 Q. Well, what else would "damages" be
17 referring to?
18 A. The way that this was phrased was in a
19 discussion about, you know, what are the numbers,
20 what are they going to be, what kind of
21 percentage, what sort of uncertainty is needed.
22 Q. Right.
23 A. And in my -- in my understanding of that,
24 that goes beyond just the Flow Rate Technical
25 Group estimates that the -- that the Subteams put
00290:01 together.
02 Q. But it includes the Flow Rate Technical
03 Group estimates, does it not?

Page 290:05 to 290:18

00290:05 A. This is where it's -- it's important to
06 recognize that the Department and Tri-Labs Team
07 and Woods Hole Team, et cetera, they were not
08 part of the Flow Rate Technical Group. So they
09 were part of the Groups that came together for
10 this Government estimate, but this Government
11 estimate was not, in and of itself, the total --
12 the total of that estimate was not the Flow Rate
13 Technical Group. It was these other Groups, as
14 well.
15 Q. (By Mr. Roman) Are you denying that the
16 estimates being discussed on July 30th, 2010 were
17 the FRTG/Department of Energy estimates that were
18 going to be released three days later?

Page 290:20 to 290:20

00290:20 A. They are --

Page 290:23 to 291:04

00290:23 A. That is what was being discussed, the
24 Flow Rate Technical Group estimates and the Woods
25 Hole and the DOE estimates.

00291:01 Q. (By Mr. Roman) And in the context of
02 discussing these estimates Secretary Chu
03 specifically raised the prospect of using these
04 estimates for damages, correct?

Page 291:07 to 294:10

00291:07 A. That's my recollection looking at these
08 notes.

09 (Exhibit No. 8844 marked.)

10 MR. ROMAN: Okay.

11 Q. (By Mr. Roman) Mr. Sogge, I'm handing you
12 what's been marked as 8844, which can be found at
13 Tab 47.

14 A. Thank you. M-h'm. (Reviewing document.)

15 Q. Do you recognize 8844?

16 A. I do.

17 Q. It's an E-mail chain to which you were a
18 party?

19 A. Yes.

20 Q. And the top E-mail is an E-mail that you
21 sent to Matt Lee-Ashley on or about July 31,
22 2010?

23 A. Correct.

24 Q. Okay. I'd like to direct your attention
25 actually to the first E-mail in the chain, from
00292:01 Kate Kelly to Matt Lee-Ashley, you, and others.
02 It actually starts on the bottom of the --

03 A. Oh, I'm sorry.

04 Q. It starts at the bottom of the Page 3,
05 I'm sorry.

06 A. Temp -- temporally the first.

07 Q. Right.

08 A. Thank you. (Reviewing document.)

09 Q. Do you see that?

10 A. I do.

11 Q. First of all, Miss Kelly was with the
12 Department of Interior?

13 A. I don't recall her specifically, but she
14 may have been with the Interior -- Department of
15 Interior communications.

16 Q. Do you recognize the E-mail address as
17 being a Department of Interior E-mail address?

18 A. I'm not seeing one other than with her

19 name. I'm sorry, is there --
 20 Q. Right [REDACTED] says -- yes. It says
 21 "Kate_Kelly@ [REDACTED]"?
 22 A. Oh, I'm sorry. I didn't see that one.
 23 Q. Which one --
 24 A. Oh, there we go. I'm sorry. I'm on
 25 the -- on two pages preceding, I see that, yes.
 00293:01 Q. And that's a Department of Interior
 02 E-mail address?
 03 A. Yes.
 04 Q. But you don't know Ms. Kelly's position
 05 with the Department of Interior?
 06 A. No, I don't remember.
 07 Q. And I'm sorry, I am actually talking
 08 about the second-to-the-last E-mail. I see
 09 there's one actually below that, still the same
 10 page and everything.
 11 Miss Kelly writes to you and Matt
 12 Lee-Ashley, and the others that, in the second
 13 paragraph: "The WH" -- and you understand that
 14 to be White House?
 15 A. Yes.
 16 Q. Correct?
 17 So: "The" White House "is pushing back
 18 on our wording in McNutt's quote and at the end
 19 of the release which suggests that scientists
 20 will continue to refine the numbers (i.e. this
 21 isn't the end of it)."
 22 Do you see that?
 23 A. I do.
 24 Q. And the release that we're talking about
 25 is the August 2nd, 2010 release that was marked
 00294:01 as Exhibit 8809, correct?
 02 A. Correct.
 03 Q. And the last line of that reads
 04 "Government scientists will continue" --
 05 "continue to analyze data and may in time be able
 06 to further refine this estimate."
 07 Correct?
 08 A. Correct.
 09 Q. And that's the line about which the White
 10 House was pushing back, correct?

Page 294:12 to 294:18

00294:12 A. I believe so. Although the E-mail
 13 doesn't say the final line, I -- I believe that
 14 is the case, yes.
 15 Q. (By Mr. Roman) Well, it talks about the
 16 end of the release, which suggests that
 17 scientists will continue to refine the numbers?
 18 A. Right.

Page 294:20 to 300:23

00294:20 Q. (By Mr. Roman) And that's a logical
 21 reading of it, is it not?
 22 A. To my mind, yes.
 23 Q. Going, now, to the second page of
 24 Exhibit 8844 --
 25 A. M-h'm.

00295:01 Q. -- you write to Miss Kelly: "Because the
 02 FRTG final report is not yet completed, I hate to
 03 close the door on final refinements by saying
 04 that this" presumably is "the final FRTG
 05 estimate. That would lock us into 'final'
 06 numbers prematurely. I don't expect additional
 07 changes, but we should retain the flexibility to
 08 do" so.
 09 I assume that means "so." It's "do do,"
 10 but I assume it means "do so"?
 11 A. Yes.
 12 Q. They're right next to each other on the
 13 keyboard.
 14 "Especially if the peer-review process
 15 (still to come) leads to suggestions for a tweak
 16 to the rates."
 17 Do you see that?
 18 A. (Reviewing document.) I'm sorry. I've
 19 lost the --
 20 Q. The middle of Page 2.
 21 A. Which paragraph are we on?
 22 Q. I was reading the whole E-mail that you
 23 sent to Ms. Kelly at 8:39 a.m.
 24 A. (Reviewing document.)
 25 MS. RODGERS: (Indicating.)
 00296:01 MR. BENSON: Right here.
 02 THE WITNESS: Oh, there we are. I'm
 03 sorry.
 04 A. Yes.
 05 Q. (By Mr. Roman) Why don't I read it again
 06 to make sure that we're both on the same page
 07 here?
 08 A. (Nodding.)
 09 Q. Okay. You write, and I'm going to use
 10 the words that I believe you meant to write.
 11 There are a couple of typos in here, I believe,
 12 so correct me if I've misstated it, please:
 13 "Because the FRTG final report is not yet
 14 completed, I hate to close the door on final
 15 refinements by saying that this" is "the final
 16 FRTG estimate. That would lock us into 'final'
 17 numbers prematurely. I don't expect additional
 18 changes, but we should retain the flexibility to
 19 do" so. "Especially if the peer-review process
 20 (still to come) leads to suggestions for a tweak
 21 to the rates."
 22 Have I read that correctly?
 23 A. Yes, with the changes for my typos, yes.
 24 Q. And that accurately reflected your view

25 at the time, correct?
00297:01 A. Correct.
02 Q. And that you ultimately pre -- prevailed,
03 did it not?
04 A. Yes.
05 Q. Because that last line remains in the
06 press release, correct?
07 A. Correct.
08 Q. Now, it's a fact, is it not, that as of
09 July 31, 2010, the peer-review process was still
10 to come?
11 A. The peer-review process for the final
12 FRTG compiled report, yes.
13 Q. Because I believe you testified earlier
14 that when the FRTG released its final estimates
15 on August 2nd, 2010, that the peer-review process
16 had been completed?
17 A. For individual components.
18 Q. Okay. So now you're peer reviewing the
19 entire -- the entirety of the FRTG report or what
20 are -- tell me what you're peer reviewing,
21 please.
22 A. Cor -- correct. This -- the final Flow
23 Rate Technical Report, which included not only
24 the estimates from Subteams and from Woods Hole,
25 et cetera, included the interpretive part
00298:01 comparing how the techniques performed against
02 the benchmark. That entire report itself was
03 subsequently peer-reviewed, as well.
04 Q. And when was that peer-reviewed?
05 A. I believe the peer review of that
06 occurred in February of 2011.
07 Q. Okay. Why not before then?
08 A. That was when we had the draft ready
09 with -- excuse me -- that's when we had the draft
10 ready with all of the components and the
11 material.
12 Q. Who conducted the peer review?
13 A. It was done through the USGS, U.S.
14 Geological Survey --
15 Q. Who -- who spec --
16 A. -- the Office of Science Ethics.
17 Q. Who specifically?
18 A. It was coordinated by Dr. Linda
19 Gundersen. She's the Head of our Office of --
20 of -- that oversees our scientific peer-review
21 Policies. She farmed it out to, I believe,
22 three -- three Experts within USGS, who I don't
23 recall their names. It's indicated in the
24 Report.
25 Q. And do you recall what the results of the
00299:01 peer-review process was?
02 A. From memory, they had some comments about
03 clarifying some language. They did not have any
04 recommendations on modifying analyses or changing

05 any of the estimates or ranges.

06 Q. Do you recall what language they
07 recommended be clarified?

08 A. No, I do not.

09 Q. Do you recall whether the -- the comments
10 were substantive or stylistic or both?

11 A. I recall them being relatively minor,
12 that they didn't take long to -- to incorporate.

13 Q. Do you know how long the peer-review
14 process took, days, weeks?

15 A. In -- in this particular case, we knew
16 that the report was coming. We knew that we had
17 a priority on trying to get it out. We had
18 notified and identified the reviewers in advance
19 that this was coming. And I seem to recall it
20 being a matter of two to four or five days.

21 Q. Okay. And is that -- forgive an
22 outsider's ignorance here, is that -- is that a
23 normal amount of time to peer review a report of
24 that length and complexity?

25 A. If you have the -- the good fortune to
00300:01 have peer reviewers who are able to set
02 everything aside and concentrate totally on that,
03 yeah, it -- I've seen that done before, I've seen
04 that happen that way before. It's atypical if
05 you're most familiar with peer review, say, in a
06 scientific journal, in which case you submit and
07 it may take months.

08 Q. And did, in fact, these -- did
09 Ms. Gundersen and the three Experts, in fact, set
10 aside all their time for these two to four or
11 five days?

12 A. I can't vouch for whether they set aside
13 all of their time, but they made this a priority.
14 We asked them to make it a priority.

15 Q. So -- so you don't know how much time
16 they spent over these two to four or five days?

17 A. I don't know how many hours an individual
18 reviewer would have spent.

19 Q. What's the minimum number of hours do you
20 think would be acceptable to review a document of
21 this length and complexity?

22 A. Boy, being outside of my technical arena,
23 I'm not sure.

Page 301:13 to 302:09

00301:13 Q. Now, when you gave the draft Final Report
14 to Ms. Gundersen and her three Experts, both
15 Miss -- well, Ms. Gundersen and the Experts were
16 aware, were they not, that the FRTG had already
17 announced its final flow rate estimates?

18 MR. BENSON: Objection, form.

19 A. I don't know specifically whether they
20 knew that, but that is indicated in the Report

21 itself.
 22 Q. (By Mr. Roman) Right. I mean, and -- and
 23 it was -- it was a press release. It was public
 24 knowledge, was it not, that the FRTG and the
 25 Department of Energy had concluded that the final
 00302:01 flow rate -- that the final flow rate was
 02 fifty --
 03 MS. RODGERS: Three.
 04 Q. (By Mr. Roman) -- 53,000 barrels per day,
 05 that the total amount of oil that had -- that was
 06 released was -- was 4.9 million barrels, correct?
 07 A. Yeah. The press release had gone out
 08 giving that decline over time, from 62,000 to 53,
 09 as -- as the Government estimate at that point.

Page 304:01 to 304:17

00304:01 Q. (By Mr. Roman) Well, I'm asking a more
 02 specific question: Do you recall that some FRTG
 03 Team Members were concerned that the
 04 methodologies they were using were unreliable?
 05 A. I remember concerns, especially early on,
 06 with people on the Plume Team concerned that the
 07 video analysis may not be appropriate given the
 08 resolution of the videos, especially that very
 09 first set of videos that was provided. In fact,
 10 at that point, I believe they refused in early
 11 May, May 10th, May 11th, they refused to conduct
 12 an analysis based on that data.
 13 Q. But it wasn't just the -- the -- the
 14 Plume Team, was it, I mean there are other
 15 Team -- Teams ex -- Team Members who expressed
 16 concern about the work of -- of the methodologies
 17 being used by their -- by their Members?

Page 304:19 to 304:24

00304:19 A. I guess it would depend on what you
 20 consider expressed concerns. I don't remember
 21 anyone on, for example, the Mass Balance Team
 22 expressing concerns about their techni -- about
 23 their approach. Nor reservoir, Nodal Team about
 24 their techniques or approach, no.

Page 311:24 to 311:25

00311:24 Q. Okay. Why did the reservoir model or the
 25 Nodal Analysis model have many unknowns?

Page 312:04 to 312:10

00312:04 A. Yeah. My personal understanding of it is
 05 that when you are dealing with these models,

06 there are many, many variables, some of which are
 07 measured, and some of which are estimated. And
 08 sometimes the estimated variables are also called
 09 an unknown, or you may not even have an estimate
 10 for it.

Page 318:17 to 319:01

00318:17 Q. (By Mr. Roman) Let's go all the way back
 18 to Exhibit 8803, the Deposition Notice. Tab 3,
 19 for those following at home.
 20 And, in particular, to Specification
 21 Nos. 50 and 51, which relate to erosion. Do you
 22 see those?
 23 A. Yes, I do.
 24 Q. Did you have an understanding of what is
 25 meant by "erosion," as used in the context of the
 00319:01 BP oil spill, or the oil spill?

Page 319:03 to 319:10

00319:03 A. I note that a definition is provided in
 04 the -- under Bullet 50.
 05 Q. (By Mr. Roman) Did you have any different
 06 understanding than is provided in the bullet?
 07 A. No, h'm-m.
 08 Q. Did you understand that there was erosion
 09 both of components of the BOP, the blowout
 10 preventer, and of the riser, at the kink?

Page 319:12 to 321:05

00319:12 A. I don't recall having any personal
 13 knowledge that erosion occurred. I -- I recall
 14 that there were questions about erosion, which I
 15 believe might influence things, such as the Nodal
 16 Analysis.
 17 Q. (By Mr. Roman) You don't know whether or
 18 not there was erosion?
 19 A. I don't recall whether there was a
 20 determination if erosion had occurred or not.
 21 Q. Do you have an understanding of which BOP
 22 components eroded?
 23 A. Specific BOP components, no.
 24 Q. Do you have an understanding of when BOP
 25 components began to erode?
 00320:01 A. No.
 02 Q. Do you have an understanding of the rate
 03 at which BOP components eroded?
 04 A. No.
 05 Q. Do you have an understanding of when the
 06 erosion of BOP components ended?
 07 A. No.

08 Q. Do you have an understanding of the
09 extent of erosion of those components?

10 A. No.

11 Q. Do you have an understanding of the
12 causes of erosion, including of BOP components?

13 A. Only in the general sense, as described
14 above, that fluids and other materials moving
15 through the components might have caused erosion.

16 Q. Do you know what specific -- did you say
17 fluids in the materials, or materials in the
18 fluids?

19 A. I think I stated "materials and fluids."

20 Q. Oh, "materials and fluids"?

21 A. (Nodding.)

22 Q. Do you know specifically what fluids and
23 materials may have caused erosion of the BOP?

24 A. I remember conversations about the
25 potential erosion due to things such as the -- I
00321:01 believe it was the top kill injecting the mud,
02 and -- and I believe what they termed the "junk
03 shot," those sorts of things.

04 Q. How about before then, any erosion at the
05 outset of the accident?

Page 321:07 to 321:12

00321:07 A. I am remembering -- well, I'm remembering
08 concerns about whether an initial explosion
09 damaged -- I don't remember if that was specific
10 to erosion -- damaged the well.

11 Q. Do you have any understanding of the
12 effect of erosion of BOP components on flow rate?

Page 321:14 to 321:20

00321:14 A. Personally, only in a general sense, that
15 there was interest by -- I believe it was by the
16 Nodal Team Members, because it could be used as
17 one of the variables in their model, I believe.

18 Q. (By Mr. Roman) What specifically do you
19 recall the Nodal Team Members saying about
20 erosion?

Page 321:23 to 322:18

00321:23 A. What I recall is being asked by what
24 would probably have been Dr. Guthrie, on whether
25 or not I had any information about erosion, which
00322:01 I did not.

02 Q. (By Mr. Roman) Did the FRTG ever arrive
03 at any conclusions about erosion of the BOP
04 where -- (nodding).

05 A. I think specific conclusions about

06 erosion, in and of itself, weren't in the scope
07 of what we were doing, so -- so, no, I -- I'm not
08 aware of any.

09 There may have been some assumptions
10 about erosion that were inherent in some of the
11 models, but it's outside of my Technical
12 Expertise.

13 Q. You don't know one way or the -- or the
14 other whether that was the case?

15 A. I don't.

16 Q. Do you know whether the FRTG ever arrived
17 at any conclusions about the effect of erosion on
18 flow rate?

Page 322:20 to 326:03

00322:20 A. Again, no, not in any technical sense at
21 all.

22 Q. (By Mr. Roman) Do you have any
23 understanding of when the riser began to erode?

24 A. No.

00323:01 Q. Do you have any understanding of whether
the riser, in fact, eroded?

02 A. I don't.

03 Q. And just to be clear: Do you have any
04 understanding of whether or not BOP components
05 eroded?

06 A. I do not. I do remember a reference to
07 the fact that there was some ongoing forensic
08 work involving that, but that might actually have
09 come from the general media, after they were --
10 after they put on the capping stack, I believe
11 they removed some other things.

12 Q. What do you recall about the ongoing
13 forensic work?

14 A. Boy, just that it was being conducted,
15 yeah.

16 Q. Do you recall by whom?

17 A. No.

18 Q. Do you recall when you saw this?

19 A. Only in general terms. I -- if I'm
20 correct, it was after they put on the -- well,
21 was it after they put on the capping stack, or
22 was -- I'm not even sure if it was after they put
23 on the capping stack, or after they put on the --
24 after they killed the well from the bottom. I
25 don't recall.

00324:01 Q. I take it, given that you don't know
02 whether or not the riser eroded, you have no idea
03 where the riser eroded --

04 A. No.

05 Q. -- or where -- or the rate at which the
06 kink in the riser eroded, if, in fact, that's
07 where it did erode?

08 A. No. No. I don't know.

09 Q. I take it you have no understanding of
10 when the erosion of the kink in the riser ended?
11 A. No.
12 Q. No understanding of the extent of erosion
13 of the kink in the riser?
14 A. (Shaking head.)
15 Q. Sorry. I need a verbal answer.
16 A. Oh, I'm sorry. No.
17 Q. Do you have any understanding of the
18 causes of erosion of the kink in the riser?
19 A. Other than the -- the general statement I
20 made earlier, it would -- it would be from the
21 materials passing through the object.
22 Q. Okay. Did you have any understanding of
23 the effect of erosion of the kink in the riser on
24 flow rate?
25 A. No. Again, not in a technical sense.
00325:01 Q. I take it you've never heard anybody at
02 the FRTG discuss erosion of the kink in the
03 riser?
04 A. I remember the question from, I believe,
05 Dr. Guthrie, asking me if I had any insights, or
06 if we knew anything about the erosion. And I
07 recall, at some point, Dr. McNutt, and possibly
08 in -- in terms as an answer to me, to relating
09 that question, saying that we didn't know
10 anything at that time.
11 Q. Do you recall when this inquiry was made?
12 A. It would have been while the Nodal
13 Analysis Team was still working, you know, on --
14 on their estimate, so it would be before they
15 turned in their Final Report. That's --
16 Q. Now, when did they turn in -- when did
17 the Nodal Team turn in its Final Report?
18 A. Boy, I do not remember that off the top
19 of my head.
20 Q. Well, we know it was --
21 A. I believe --
22 Q. -- before August 2nd, right?
23 A. I was going to say I believe it was in --
24 in mid July.
25 Q. It's fair to say, then, is it not, that
00326:01 in its Preliminary and Final Reports, as updated
02 and amended, the FRTG did not account for erosion
03 in its flow rate estimates?

Page 326:06 to 326:23

00326:06 A. From a technical standpoint, I don't know
07 how any of the Subteams would have handled their
08 assumptions about erosion one way or another.
09 Q. Well, do you know whether any of the
10 Subteams considered erosion?
11 A. Considered in -- in terms of their
12 modeling?

13 Q. Right.

14 A. I don't know the technical details of
15 that.

16 Q. Well, and that's within -- and that's
17 what -- you are here as a spokesman for the -- as
18 a Representative of the United States Government
19 and of the FRTG, and we have two Topics that
20 relate specifically to erosion. And my question
21 is: Did the United States Government, did the
22 FRTG take erosion into account in any of its flow
23 rate estimates?

Page 327:05 to 327:13

00327:05 A. My understanding would be, based on
06 getting questions from the Nodal Team asking
07 about erosion, I would conclude that erosion is
08 one of the variables or one of the things that
09 they considered in -- in their modeling.

10 Q. (By Mr. Roman) Well, how did they
11 account -- how did the Nodal Team count --
12 account for erosion in its flow rate estimates?

13 A. That I don't know.

Page 327:15 to 328:19

00327:15 If I can make a suggestion?

16 MR. ROMAN: (Indicating.)

17 MR. BENSON: Were -- and maybe we
18 confused the issue by how we did this. We
19 designated Mr. Sogge, but also Mr. Guthrie and
20 Mr. Maclay on this subject, and they'll be able
21 to testify about the details of what they did and
22 what their Teams did.

23 MR. ROMAN: Well, to the extent that
24 you designated Mr. Sogge on erosion issues,
25 what is --

00328:01 MR. BENSON: I can --

02 MR. ROMAN: -- what is the extent of
03 his --

04 MR. BENSON: I can --

05 MR. ROMAN: -- knowledge of erosion?

06 MR. BENSON: I can speak to that.

07 And, you know, again, I apologize, if this has
08 made for a difficult situation.

09 I think the extent of his knowledge is to
10 say that the two Teams that considered erosion
11 were Nodal and Reservoir, and you'll -- you can
12 get their answers from Mr. Guthrie and
13 Mr. Maclay, respectively.

14 MR. ROMAN: That's the purpose for
15 which he's been designated on erosion?

16 MR. BENSON: That's the purpose.

17 MR. ROMAN: That's an interesting

18 interpretation of the designation obligation.
 19 Let's take a break, please.

Page 332:01 to 332:01

00332:01 UNITED STATES DISTRICT COURT
 01 EASTERN DISTRICT OF LOUISIANA

Page 332:03 to 332:05

00332:03 IN RE: OIL SPILL) MDL NO. 2179
 03 BY THE OIL RIG)
 04 "DEEPWATER HORIZON" IN) SECTION "J"
 04 THE GULF OF MEXICO, ON)
 05 APRIL 20, 2010) JUDGE BARBIER
 05) MAG. JUDGE SHUSHAN

Page 332:09 to 332:11

00332:09 REPORTER'S CERTIFICATION
 09 TO THE ORAL AND VIDEOTAPED DEPOSITION OF
 10 MARK KENNETH SOGGE
 10 UNITED STATES OF AMERICA 30(b)(6)
 11 SEPTEMBER 18, 2012
 11 VOLUME 1

Page 332:14 to 332:17

00332:14 I, Emanuel A. Fontana, Jr., Certified
 14 Shorthand Reporter in and for the State of Texas,
 15 hereby certify to the following:
 16 That the witness, MARK KENNETH SOGGE, was
 16 duly sworn by the officer and that the transcript
 17 of the oral deposition is a true record of the
 17 testimony given by the witness;

Page 332:18 to 332:20

00332:18 That the deposition transcript was submitted
 19 on , 2012, to the witness or to
 19 Attorney _____ for the witness to
 20 examine, sign, and return to Worldwide Court
 20 Reporters, Inc., by , 2012.

Page 332:21 to 332:23

00332:21 That the amount of time used by each party
 22 at the deposition is as follows:
 23 Mr. Roman - 6 Hours, 43 Minutes

Page 333:01 to 333:03

00333:01 I further certify that I am neither counsel
01 for, related to, nor employed by any of the
02 parties in the action in which this proceeding
02 was taken, and further that I am not financially
03 or otherwise interested in the outcome of the
03 action.

Page 333:04 to 333:05

00333:04 SUBSCRIBED AND SWORN to by me on this 18th
05 day of September, 2012.

Page 333:08 to 333:12

00333:08	
08	<hr/> Emanuel A. Fontana, Jr., RPR
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