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IN THE UNITED STATES DISTRICT COURT

3

DISTRICT OF NEW JERSEY

4

Civ. No. 04-3749 (JAP)

5

(Consolidated Cases)

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Hon. Joel A. Pisano

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IN RE ROYAL DUTCH/SHELL |

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TRANSPORT SECURITIES |

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LITIGATION |

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Volume I

13

Videotaped Deposition of John Richard Pay

14

Washington, D.C.

15

Monday, January 22nd, 2007

16

10:08 a.m.

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23 Job No. 22-94049

24 Pages 1 - 235, Volume I

25 Reported by: Laurie Bangart-Smith

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Videotaped Deposition of

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JOHN RICHARD PAY

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6 Held at the offices of:

7

LEBOEUF, LAMB, GREENE & MACRAE, LLP

8

1875 Connecticut Avenue, Northwest

9

Suite 1200

Washington, D.C. 20009

Taken pursuant to notice, before Laurie  
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and Notary Public in and for the District of  
Columbia.

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0004

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2 A P P E A R A N C E S C O N T I N U E D

3 O N B E H A L F O F K P M G A C C O U N T A N T S N . V . :

4 N I C H O L A S W . C . C O R S O N , E S Q U I R E

5 H O G A N &amp; H A R T S O N , L L P

6 8 7 5 T h i r d A v e n u e

7 N e w Y o r k , N e w Y o r k 1 0 0 2 2

8 T e l e p h o n e : ( 2 1 2 ) 9 1 8 - 3 0 0 0

9 O N B E H A L F O F J U D I T H B O Y N T O N :

10 R E B E C C A E . W I C K H E M , E S Q U I R E

11 F O L E Y &amp; L A R D N E R , L L P

12 7 7 7 E a s t W i s c o n s i n A v e n u e

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14 T e l e p h o n e : ( 4 1 4 ) 2 9 7 - 5 6 8 1

15 O N B E H A L F O F S I R P H I L I P W A T T S :

16 A I M E E D . L A T I M E R , E S Q U I R E

17 M A Y E R , B R O W N , R O W E &amp; M A W , L L P

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19 W a s h i n g t o n , D . C . 2 0 0 0 6 - 1 1 0 1

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3 A L S O O N B E H A L F O F R O Y A L D U T C H / S H E L L A N D T H E

4 W I T N E S S :

5 E A R L D . W E E D , E S Q U I R E

6 S E N I O R L I T I G A T I O N C O U N S E L

7 S H E L L O I L C O M P A N Y , L i t i g a t i o n D e p t .

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11 A L S O O N B E H A L F O F S H E L L A N D T H E W I T N E S S :

12 J O N A T H A N R . T U T T L E , E S Q U I R E

13 D E B E V O I S E &amp; P L I M P T O N , L L P

14 5 5 5 1 3 t h S t r e e t , N o r t h w e s t

15 W a s h i n g t o n , D . C . 2 0 0 0 4

16 T e l e p h o n e : ( 2 0 2 ) 3 8 3 - 8 0 0 0

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23 Also present:

24 Steven Peitler, Investigator

25 Cali Day, Videographer

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0007

1 JOHN RICHARD PAY, Volume I, January 22, 2007

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

3 THE VIDEOGRAPHER: Here begins Tape

4 Number 1 in the deposition of John Pay in the

5 matter of Royal Dutch/Shell Transport Securities

6 Litigation, in the United States District Court,

7 District of New Jersey, Case Number 04-3749.

8 Today's date is January 22nd, 2007. The time is  
9 10:08 a.m. The video operator today is Cali Day  
10 of LegaLink New York. This deposition is taking  
11 place at 1875 Connecticut Avenue, Northwest,  
12 Washington, D.C., 20009.

13 Would counsel please identify themselves  
14 and state whom they represent.

15 MR. HABER: Jeffrey Haber from  
16 Bernstein, Liebhard & Lifshitz, on behalf of the  
17 lead plaintiff, Peter M. Wood and the class.

18 MS. KERN: Emily Kern from Bernstein,  
19 Liebhard & Lifshitz, plaintiff and the class.

20 MS. BRAMBLE: Jocelyn Bramble, LeBoeuf  
21 Lamb, on behalf of the corporate defendants, Shell  
22 Transport and Royal Dutch, and also Mr. Pay.

23 MR. WEED: Earl Weed, in-house Shell.

24 MR. TUTTLE: Jonathan Tuttle, Debevoise  
25 & Plimpton, LLP, on behalf of the Shell defendants

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 and the witness here today.

3 MR. ADLER: Derek Adler, Hughes, Hubbard  
4 & Reed, on behalf of PricewaterhouseCoopers, UK.

5 MR. FOUKAS: Saavas Foukas, Hughes,  
6 Hubbard & Reed, on behalf of  
7 PricewaterhouseCoopers, LLP.

8 MR. CORSON: Nicholas Corson, Hogan &  
9 Hartson, on behalf of KPMG Accountants, NV.

10 MS. LATIMER: Aimee Latimer, Mayer,  
11 Brown, Rowe & Maw, on behalf of defendant Sir  
12 Philip Watts.

13 MS. WICKHEM: Rebecca Wickhem, Foley &  
14 Lardner, LLP, on behalf of Judith Boynton.

15 MR. FERRARA: Ralph Ferrara, LeBoeuf,  
16 Lamb, Greene & MacRae, on behalf of Shell  
17 Transport and Trading, Royal Dutch/Shell, and  
18 Mr. Pay, our witness today.

19 THE VIDEOGRAPHER: The court reporter  
20 today is Laurie Bangart-Smith of LegaLink New  
21 York. Would the reporter please swear in the  
22 witness.

23

24

25

0009

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 JOHN RICHARD PAY,

3 having been duly sworn, testified as follows:

4 EXAMINATION BY COUNSEL FOR PLAINTIFFS

5 BY MR. HABER:

6 Q Good morning, Mr. Pay.

7 A Good morning.

8 Q As you know, today I'm going to ask you

9 a series of questions about this litigation that

10 we're all involved in here. You understand that

11 all of my questions are going to be related to the

12 events that are the subject matter of this

13 lawsuit?

14 A Yes.

15 Q If you don't understand a question,

16 would you let me know?

17 A I will.

18 Q Great. And if you don't understand a

19 question, I will let you know that I will do what

20 I can to rephrase the question or do whatever I

21 can to make the question understandable for you.

22 If you don't hear a question, will you

23 tell me?

24 A I will.

25 Q And of course, if you don't hear it,

0010

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 I'll repeat it or again try to rephrase it so you

3 do understand it.

4 A Yep.

5 Q Just a word about responding to

6 questions. Even though this proceeding is being

7 videotaped, nevertheless, as you see, we have a

8 court reporter, so it is important for you to

9 verbalize all your responses, so please refrain

10 from "uh-huh," head nods and the like.

11 A I'll try to remember that.

12 Q Great. Thank you.

13 If you don't know the answer to a

14 question, would you say so?

15 A I will say it, yes.

16 Q Okay. And again, because the  
17 proceedings are being transcribed, it is important  
18 that you speak clearly and, as I said, audibly  
19 when you respond. Is that understood?

20 A It's understood.

21 Q Great. Thank you.

22 One of the other things that often  
23 happens in these proceedings is either I'll be  
24 asking a question, you'll be responding, and  
25 sometimes we talk over each other. If you will do  
0011

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 your best not to talk over me, I will do my best  
3 not to talk over you. Is that acceptable?

4 A Yes.

5 Q Okay. And finally, if you need a break  
6 for whatever reason, I'll do what I can to give  
7 you that break. The only time that I won't honor  
8 a request for a break is if there's a question  
9 pending, but otherwise, anytime you need a break,  
10 please let me know.

11 A I will.

12 Q Great.

13 Have you had your testimony taken in a  
14 proceeding before a regulatory body in connection  
15 with Shell's recategorization?

16 A I had to take interview at the FSA in  
17 London, if that is an example of what you're  
18 referring to.

19 Q Yes, it is.

20 A Okay.

21 Q At the time that you were interviewed,  
22 were you represented by counsel?

23 A Yes, by representatives of the company  
24 who are here with me today.

25 Q And so that would be Debevoise &  
0012

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 Plimpton?

3 A Yes, and LeBoeuf, and Earl Weed was  
4 there from in-house legal. And there was another  
5 company there, a London-based legal company. Was  
6 it Butler or something? I'm not quite sure what

7 capacity they were in, but there was another legal  
8 firm represented there.

9 Q And at the time that the interview had  
10 occurred -- withdrawn. When was the interview  
11 given?

12 A I believe that was October 2004.

13 Q And at the time that you had given the  
14 interview, did you give the answers to the  
15 questions to the best of your knowledge and  
16 recollection?

17 A Yes.

18 Q And were your answers truthful?

19 A Yes.

20 Q Did you have an opportunity to review a  
21 copy of the transcript of the interview?

22 A Yes. Twice.

23 Q Okay. So you know from that proceeding  
24 then -- you have a good handle on what to expect  
25 in this proceeding, a similar type of situation.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 I'm going to ask a series of questions.

3 A Yeah.

4 Q Just for the record, can you give us  
5 your name, full name and your current address.

6 A My name is John Richard Pay, P-A-Y. My  
7 address is -- I'll probably have to spell it for  
8 you. It's Dr., D-R, the abbreviation.

9 Kuypersstraat, so K-U-Y-P-E-R-S-T-R-A-A-T, House  
10 Number 4B. That's in The Hague. The postal code  
11 is 2514BB in the Netherlands.

12 Q And how long have you resided in the  
13 Netherlands?

14 A In this particular continuous period of  
15 time, since May 2002. I've resided there off and  
16 on over the last 20 years or so.

17 Q I just want to go back to the FSA  
18 proceedings. Just one other follow-up with regard  
19 to reviewing the transcript. Did you also have an  
20 opportunity to make comments and changes to the  
21 transcript?

22 A Yes. However, I would characterize the  
23 changes I suggested as being, well, areas where



24 clearly misspellings or typographical areas had  
25 been made or where I felt from the context one  
0014

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 word had been misheard from another word, "as"  
3 instead of "is," something like that, but, as I  
4 recall, the majority of my comments were  
5 punctuation comments to help ease the  
6 understanding of what was being said.

7 Q So in reviewing and making comments, you  
8 were satisfied with the testimony that you had  
9 given?

10 A Well, I, I didn't see it as an  
11 opportunity to change the testimony that I had  
12 given, nor did I -- nor did I see that it was an  
13 opportunity for me so to do.

14 Q I see.

15 MR. TUTTLE: Can I ask him a follow-up?  
16 Did you compare the transcript against the  
17 tape-recording?

18 THE WITNESS: No. I wasn't given that  
19 opportunity.

20 BY MR. HABER:

21 Q But nevertheless, at the time you gave  
22 the testimony, it was, to the best of your  
23 recollection, the facts that you had firsthand  
24 knowledge of; is that correct?

25 A Yes.

0015

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q Going back now to your background, if  
3 you can give us an educational background,  
4 starting with university or college that you  
5 attended.

6 A I attended the University of London  
7 Imperial College of Science and Technology between  
8 1981 and 1984, where I studied petroleum  
9 engineering. I graduated from there in, in 1984  
10 and was offered a job with Shell, which I took in  
11 I think October of that year.

12 Would you like me to run through my CV,  
13 as it were?

14 Q No, I'll get to that in a second. I'll

15 get to it.

16 A Okay.

17 Q When you graduated in 1984, was the  
18 degree that you graduated with petroleum  
19 engineering?

20 A Petroleum engineering, yes, sir.

21 Q Did you go on to do any additional  
22 studies, such as a master's or a Ph.D.?

23 A No. I joined Shell straight from  
24 college.

25 Q Do you have any professional licenses?

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A No.

3 Q Are you a member of any professional  
4 organizations, such as the Society of Petroleum  
5 Engineers?

6 A I am. I've been a member since I  
7 started my university education.

8 Q So since 1981?

9 A Yes.

10 Q Are you a member of the Royal Institute  
11 of Engineers?

12 A No.

13 Q Are you a member of any other  
14 professional organization?

15 A No.

16 Q Do you still hold membership in the  
17 Society of Petroleum Engineers?

18 A Yes. I renew it annually.

19 Q What is the purpose of the organization,  
20 if you know?

21 A I don't know. I don't know what their  
22 official stated purpose is.

23 Q Okay. Why did you join the  
24 organization?

25 A Where or why?

0017

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q Why?

3 A Why? Because, well, everybody else on  
4 the course was encouraged to do so. It's a  
5 professional body, so you say what is the purpose,

6 I can say the purpose as perceived by me in terms  
7 of the benefits I derive from being a member is  
8 probably in terms of publications, which are  
9 received as a journal which is published every  
10 month, which contains information on jobs that are  
11 available within the industry, but mostly  
12 technical matters of interest to engineers  
13 practicing in the industry, so papers that would  
14 have been filed by members, giving results of  
15 research or field history operational experience  
16 that may be of interest to other members in doing  
17 their jobs, and also a digest or editorials on the  
18 state of employment within the industry, movements  
19 within the -- you know, the tenor of the industry  
20 as it's perceived.

21 Q Did you attend any meetings of the  
22 organization throughout the time period that  
23 you've been a member?

24 A Well, it depends what you mean by  
25 "meetings." Did you have any specific types of  
0018

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 meetings in mind?

3 Q That was just a general question. If  
4 you can break it down if there are different types  
5 of meetings that you have attended, that would be  
6 helpful.

7 A Routinely there are meetings. Each  
8 chapter of the organization, the society, is  
9 broken down into local chapters, so, for example,  
10 I would imagine there is a local chapter in  
11 Houston and perhaps another one in New Orleans,  
12 and the members who are residing and working in  
13 that area typically will get together once a  
14 month. It's kind of a social event. It's an  
15 opportunity to talk with other professionals  
16 working in your industry. Usually there will be a  
17 presentation on again a topic of general interest  
18 to the audience, and a dinner and a chance to have  
19 a bit of relaxation time with like-minded people.

20 Q Now, are there larger meetings where the  
21 entire organization gets together, sort of like an  
22 annual meeting of the SPD?

23 A There are conventions and exhibitions  
24 held around the world. I have never been to one  
25 of the conventions that typically I think are

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 usually held here in the United States. I have  
3 never been to such a large gathering. I have been  
4 to other meetings.

5 In particular there was one I recall in  
6 Stavanger in Norway, which was with the subject of  
7 reserves estimating procedures and guidelines, and  
8 in my capacity as -- I was in the job as the  
9 Reserves Coordinator for Shell. I was invited to  
10 attend that. And again the subject really was, it  
11 was a workshop at which various matters, general  
12 matters -- I mean there was no strict agenda that  
13 was attempted. You know, there was no agenda that  
14 was intended to be resulting in any specific  
15 conclusions or anything; it was just an  
16 opportunity for people to get together and discuss  
17 issues relating to reserves estimation. There  
18 were some case histories, there was some  
19 discussion of the regulations, et cetera, et  
20 cetera, so a series of presentations to an  
21 audience, with the opportunity to ask questions  
22 for clarification.

23 Q Do you recall when this workshop  
24 occurred?

25 A I can't remember the exact date, I'm  
0020

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 afraid. It was after I arrived in The Hague to do  
3 the job of Reserves Coordinator, so after May or  
4 2002. Whether it was in the year 2002 or 2003, I  
5 can't specifically remember.

6 Q Did anyone attend from Shell with you?

7 A Anton Barendregt, Reserves Auditor, was  
8 there as well.

9 Q Who was Anton Barendregt?

10 A He was the Reserves Auditor retained by  
11 Shell in connection with reserves estimation.

12 Q Is Mr. Barendregt a reservoir engineer?

13 A I believe he is.

14 Q During your time as the Group Reserves  
15 Coordinator -- and we will get into that when we  
16 get into your CV and, of course, throughout the  
17 entire proceeding. Did you work with  
18 Mr. Barendregt in fulfilling your  
19 responsibilities?

20 MR. TUTTLE: Objection; form.

21 THE WITNESS: I, I would actually quite  
22 like the question to be repeated, because I forgot  
23 the first part of it as well.

24 BY MR. HABER:

25 Q I apologize. During your tenure as

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Group Reserves Coordinator, did you work with  
3 Mr. Barendregt? I'm speaking just generally.

4 A Yeah, well, can you define what you mean  
5 by "work with"?

6 Q Did you work with him with regard to the  
7 year-end closeout of reserves reporting, the ARPR  
8 process?

9 MR. TUTTLE: Objection to form.

10 BY MR. HABER:

11 Q You can answer.

12 MR. TUTTLE: Well, I think he's just  
13 asking if you can define what you mean by "work  
14 with," so I think that's the reason for the  
15 objection.

16 MR. HABER: Okay. All right. I'll  
17 rephrase.

18 BY MR. HABER:

19 Q Can you describe -- let's take the ARPR  
20 process, for instance. Can you describe the  
21 interactions that you had with Mr. Barendregt.

22 A Mr. Barendregt was present in the office  
23 and took a role in reviewing the submissions of  
24 the reserves reports from the different operating  
25 companies within the Shell Group around the world.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 He would be a part of the process of reviewing the  
3 submissions and would take a, if you like, an  
4 independent view as to their veracity and

5 reasonableness. So my job was to essentially  
6 compile the figures that were submitted. His job  
7 was to provide an independent review of the  
8 figures that had been submitted.

9 Q Now, when you say he was present in the  
10 "office," which office are you referring to?

11 A Well, he had a work space in our office  
12 building in The Hague where I was based.

13 Q Okay. Was Mr. Barendregt in this office  
14 space on a daily basis throughout the year?

15 A No. It was reserved for his use as and  
16 when he felt it convenient to use it, because much  
17 of his job involved visiting the operating  
18 companies to review their procedures and  
19 volumetric estimates. He spent large parts of the  
20 year traveling the world and not actually present  
21 in the office that we referred to.

22 Q Do you know how many visits he made a  
23 year to the various operating units?

24 A Precisely, no. I can offer an estimate  
25 if you would like me to do so. I believe it would

0023

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 be in the order of ten per year, something in that  
3 order.

4 Q Okay. To your knowledge, was  
5 Mr. Barendregt a full-time employee?

6 A To my knowledge, he had a separate  
7 service contract, so I would not characterize him  
8 as a full-time employee.

9 Q Now, earlier in your answer you say that  
10 Mr. Barendregt took a role in reviewing the  
11 submissions of the reserves reports from the  
12 different operating units. Do you know what he  
13 did in reviewing those submissions?

14 A Well, he did many things.

15 Q Again I'm just trying to get your  
16 knowledge and your understanding of what he had  
17 done.

18 A My observation of what he did, so what I  
19 observed him doing, was comparing the submissions  
20 of the individual companies, comparing them to --  
21 I'm listing these in no particular order, but

22 certainly as a result of the visits that he would  
23 have made to operating companies during the year,  
24 he would clearly be looking for evidence that any  
25 recommendations that he had made as a result of  
0024

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 those visits would have been implemented, was one  
3 of the things. He did -- he made some, shall we  
4 say, consistency checks that the numbers that were  
5 reported as of the end of year X were consistent  
6 and could be audited, traced back through a series  
7 of changes, documented changes to the balance at  
8 the start of that year, so that the changes that  
9 had been registered by the company made sense,  
10 were understandable and supported by him.

11 He would on occasion ask for  
12 clarification of the numbers that had been  
13 submitted if he felt that was necessary, and I  
14 would say they were the main activities, and he  
15 would produce a report which would be provided to  
16 internal management and also our external auditors  
17 in relation to essentially providing a statement,  
18 providing his opinion with regard to the, to the  
19 proved reserves figures that had been reported.

20 Q Now, with all the activities that you  
21 just described based upon your observation, did  
22 you work with Mr. Barendregt in these various  
23 activities; that is, the activities that you just  
24 described?

25 MR. TUTTLE: You mean did he assist him?  
0025

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 BY MR. HABER:

3 Q Yes, work with him, assist him, yes.

4 A Our interaction during that process,  
5 typically his first -- the procedure that we  
6 worked under was not formally documented, but as a  
7 matter of principle, if he had a question  
8 concerning the finding of any particular company,  
9 he would first of all ask me if I had any further  
10 information that might help address his question,  
11 and otherwise asked me to seek further guidance  
12 from the company that had filed the report if I



13 was not able to answer the question.

14 Q Can you think of any other interaction  
15 that you had with him with regard to the  
16 activities that you just testified about?

17 A No, I don't think I can.

18 Q Okay. Now, also earlier in your  
19 testimony you said that Mr. Barendregt -- and I'm  
20 quoting now -- "would be a part of the process of  
21 reviewing the submissions and would take a, if you  
22 like, an independent view as to the veracity and  
23 reasonableness."

24 Was it your understanding -- withdrawn.

25 Did you understand Mr. Barendregt to be

0026

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 independent of Shell?

3 A In the way he executed his activities,  
4 yes.

5 Q What's the basis for that understanding?

6 A My observation of the way in which he  
7 conducted his task gave me the very clear  
8 impression that he considered his role to be  
9 independent from my role and from the company  
10 itself, and that he was acting on behalf of the  
11 external auditors.

12 Q Do you know who Mr. Barendregt reported  
13 to?

14 A In an organizational sense I would say  
15 that he didn't report to anyone within the company  
16 per se.

17 Q How about outside of an organizational  
18 sense, to use your --

19 A Well, he was working on behalf of, and  
20 therefore submitted his opinions to, KPMG and  
21 PricewaterhouseCoopers. And he also provided an  
22 opinion that would have been made use of by those  
23 inside the company. He would sign off on the  
24 final numbers, so people at Frank Coopman and  
25 Lorin Brass' level, but I would not characterize

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 his relationship as "reporting to" in the sense  
3 that that would imply that he was in any way being



4 directed by those people.

5 Q Did you ever get the sense that there  
6 was, on his part, a reluctance to give an adverse  
7 or negative report on an audit that he conducted  
8 in a particular operating unit?

9 MR. TUTTLE: Objection to form.

10 You can answer.

11 THE WITNESS: Sorry. Can you repeat the  
12 question, please.

13 BY MR. HABER:

14 Q Sure. What I'd like to know is, from  
15 your observations or with regard to any  
16 communications you had with him, did he ever  
17 express a feeling he had --

18 A Okay.

19 Q -- of a reluctance to give a negative or  
20 adverse report in an audit opinion that he was  
21 issuing?

22 A No.

23 Q And going back to your earlier  
24 question -- I'm sorry -- your earlier answer where  
25 you said again that part of his role would be to

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 review the veracity and reasonableness of an  
3 operating unit's submission, what is your  
4 understanding of how he did that?

5 MR. TUTTLE: Objection; asked and  
6 answered.

7 MR. HABER: Well, I also asked him about  
8 the independence. Now I want to know specifically  
9 the veracity. Those were his words.

10 MR. TUTTLE: I think you asked him how  
11 he understood Mr. Barendregt went about his work,  
12 so if that's a different question --

13 MR. HABER: It is a different question,  
14 because now I'm talking about reviewing the  
15 veracity. It's particular.

16 BY MR. HABER:

17 Q You can answer.

18 MR. FERRARA: I think you should repeat  
19 the question.

20 MR. HABER: Okay.

21 BY MR. HABER:

22 Q What is your understanding of the  
23 process of how Mr. Barendregt reviewed the  
24 veracity of submissions from the operating units?

25 A My understanding is that he relied  
0029

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 considerably on the visits that he made during the  
3 year, and certainly for the major operating units  
4 he attempted to make on-site visits every three  
5 years or so, where he would then -- during those  
6 visits he would be doing the more detailed  
7 assessment or review of, of specific reserves  
8 booked in relation to specific fields and going  
9 into the detail of the data that was available to  
10 support those bookings.

11 For the year in process, my  
12 understanding was that he would be looking for  
13 conformance with the information that he had most  
14 recently viewed and a clear explanation of any  
15 changes or significant new additions that had been  
16 made by the operating company, and checking that,  
17 to the extent it was possible, obviously from a  
18 remote -- being remote from the company itself,  
19 checking that due process had been followed in  
20 relation to the group's internal guidelines on the  
21 preparation of those new estimates.

22 Q And when you say "conformance" with  
23 information, what do you, what do you mean by  
24 that?

25 A That if he reviewed a particular field  
0030

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 during part of his visit, his most recent visit,  
3 that the numbers that were reported for that field  
4 were numbers he would recognize or could be  
5 explained in relation to the information that he  
6 had.

7 Q You also were talking about checking  
8 that -- you say due process had been followed in  
9 relation to the group's internal guidelines. What  
10 did you mean by that?

11 A Well, that we had the group guidelines

12 for the preparation of proved reserves, and if  
13 reserves were submitted -- reserves estimates were  
14 submitted, that he would satisfy himself that  
15 those estimates had been prepared, if he felt it  
16 necessary, in conformance with the group  
17 guidelines.

18 Q Do you know if part of his due process  
19 review also included a review of the submissions  
20 against the SEC's reserves reporting requirements?

21 A My understanding was that he reviewed  
22 the submissions in relation to the group's  
23 guidelines, which were themselves implemented or  
24 written in a way that would allow the SEC proved  
25 reserves regulation to be implemented in our own  
0031

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 business context.

3 It's important to realize that the SEC  
4 rules do not present a clear cookbook recipe  
5 procedural step-by-step process to follow in the  
6 estimation of proved reserves, and therefore the  
7 guidelines that were issued and updated from time  
8 to time were -- that was an internal document that  
9 attempted to frame the requirements of the SEC  
10 rules as we understood them in the context of the  
11 people -- in terms that people operating in our  
12 business would be able to understand in relation  
13 to their day-to-day work. So the review was  
14 conducted against our guidelines, and the  
15 guidelines themselves gave a reflection of what we  
16 understood the SEC rules to be.

17 Q In your capacity as Group Reserves  
18 Coordinator, did you ever seek legal counsel with  
19 regard to the internal guidelines being compliant  
20 with SEC reserves reporting requirements? And I'm  
21 only looking right now for a yes-or-no answer.

22 MR. TUTTLE: And I'm going to instruct  
23 him just that this is a yes-or-no answer, and you  
24 should not -- until we have an opportunity to  
25 discuss, if you received any legal advice, you  
0032

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 should not disclose any legal advice you received

3 or the substance of your communication, but you  
4 can answer yes or no.

5 THE WITNESS: No.

6 BY MR. HABER:

7 Q Did you have any training with regard to  
8 the SEC's reserves reporting requirements?

9 A Yes, in relation to my training as a  
10 graduate coming into the company, the training I  
11 received as part of my general training, I was  
12 made aware that there was the requirement to  
13 report reserves in the Annual Report under the  
14 rules of the SEC.

15 Also I was assured by the people  
16 delivering the training that the procedures we had  
17 in place and those documented in the guidelines  
18 that were available to engineers such as myself  
19 working in the company, that those guidelines were  
20 designed to ensure compliance with the SEC  
21 requirements.

22 In relation to the detail of the SEC  
23 rules, no, I would say -- I didn't go on a course  
24 that was labeled "SEC Proved Requirements," so it  
25 was a feature of my general training but no

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 specific training.

3 Q And this general training, this was  
4 given by Shell; is that correct?

5 A Yes.

6 Q When did you receive this training?

7 A A period of time starting from  
8 effectively the day I joined, so it would have  
9 been shortly after October the -- October on --  
10 sorry. October 1984 would have been the first  
11 time I was given, given that training.

12 Q Was this a one-time course, or was this  
13 something that continued throughout your career at  
14 Shell?

15 A It came up, I would say, on two or three  
16 courses that I attended over a five- or six-year  
17 period in the first part of my employment with  
18 Shell.

19 Q So that would be somewhere between

20 October of 1984 through say roughly '90, 1990?

21 A Approximately.

22 Q And thereafter you didn't have any  
23 course work?

24 A No. By that time I considered myself,  
25 and I think was considered by the company, to be

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 a, a mature reservoir engineer.

3 Q This training that you received with  
4 regard to SEC reserves reporting requirements, was  
5 this part of a larger course work?

6 A Yes.

7 Q And what was that course work?

8 A Reservoir engineering training.

9 Q Is this training that you received when  
10 you first began your tenure at Shell?

11 A I think I answered previously that it  
12 is, was, yeah.

13 Q I'm just trying now -- we were talking  
14 very earlier about the CV, and this sort of gets  
15 into it. Is this one of the first things --  
16 really what I wanted to know, is this one of the  
17 first things you started when you began your  
18 career?

19 A Okay. My first -- the first few months  
20 of my career at Shell consisted of a series of  
21 training programs, covering the full spectrum of  
22 the technical requirements of petroleum engineers  
23 working in Shell. There was a training package  
24 that was designed -- I, myself, had a degree in  
25 petroleum engineering. I was relatively unusual

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2 in having such a degree. Probably 90 percent of  
3 my colleagues at that time had mechanical or civil  
4 or chemical engineering degrees, and therefore the  
5 training material in the first part of my career  
6 was intended to bring everybody up to the same  
7 level of technical understanding of the specific  
8 petroleum engineering topics that they would be  
9 working with. So part of it was reservoir  
10 engineering. There were many other aspects that

11 were also covered.

12 Q Okay. When you attended the SPE meeting  
13 where they talked about reserves estimating  
14 procedures and guidelines, do you recall generally  
15 what was discussed at that meeting?

16 A Well, there were many, many topics  
17 discussed.

18 Q Were there any topics discussed  
19 concerning the SEC Reasonable Certainty Standard?

20 A Not specifically that I recall. There  
21 was a -- it was a morning or a half morning  
22 devoted to what I might characterize as  
23 "difficulties" that the industry practitioners  
24 faced in interpreting and applying the SEC rules.  
25 I can't remember the, the person's name, but a, a  
0036

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 consultant had prepared a, a presentation which he  
3 delivered, essentially pointing to some of the  
4 difficulties that practitioners faced in  
5 understanding in a practical sense how to  
6 implement the SEC rules, and that -- the  
7 information that was presented was not new to me,  
8 because I was very familiar with exactly the same  
9 kind of difficulties. And it's in response to  
10 those difficulties essentially that our internal  
11 guidelines were and are considered necessary to  
12 give our engineers some practical guidance as to  
13 how they should actually compile their estimates.

14 Q Do you recall if this speaker was a  
15 member of the industry?

16 A No, this -- my recollection is that he  
17 worked for an auditing firm.

18 Q Do you recall if any of the speakers or  
19 presenters at this SPE meeting came from the SEC?

20 A I'm quite sure they didn't, did not.

21 Q Okay. Do you recall if any of Shell's  
22 competitors attended this meeting, such as members  
23 from Exxon, Mobil or BP?

24 A Certainly I recall there was at least  
25 one representative from BP, and I would  
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2 characterize most of the rest of the audience were  
3 drawn from oil companies who you would perhaps  
4 characterize as competitors: Norske Hydro,  
5 Statoil, Total was represented, so there were many  
6 companies represented there.

7 Q Do you recall any discussions with a  
8 representative of BP?

9 A I had a very brief discussion. There  
10 was a presentation made by an engineer working for  
11 BP as part -- on a field development that they had  
12 in planning, and as part of which he indicated an  
13 approach or indicated a range of reserves  
14 estimates ranging from proved through to proved  
15 plus probable, and then the proved plus probable  
16 plus possible estimates, so then the range. And  
17 he indicated a figure for proved, which surprised  
18 me in terms of its size, and I did have a very  
19 brief conversation with him, indicating that I  
20 felt that his approach to the proved estimation  
21 was somewhat optimistic.

22 Q Do you recall what field he was talking  
23 about?

24 A It's a field which goes by -- it's in I  
25 think Azerbaijan. It goes by the abbreviation  
0038

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 ACG, and each of those letters -- I think the A  
3 stands for "Azeri" or something like this, but  
4 it's a huge field in the Caspian region. I'm  
5 sorry. I can't remember specifically what the ACG  
6 stands for.

7 Q I can guarantee you I couldn't pronounce  
8 it, so . . .

9 Do you recall having discussions with  
10 any members of the audience about Shell's  
11 guidelines?

12 A I don't recall any specific discussion  
13 on the Shell guidelines, no.

14 Q How about generally?

15 A Generally -- well, the reason I was  
16 there was, or one of the reasons I was there, I  
17 took -- I was invited to deliver a presentation on  
18 Shell's hydrocarbon classification system

19 generally, so -- of which proved reserves is a  
20 part, but in the context of the classification  
21 system, only one of many constituent parts, the  
22 other constituent parts essentially covering  
23 various categories of reserves that are not yet  
24 proved.

25 the purpose of my presentation was to  
0039

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 explain how, in Shell, we categorized reserves  
3 into different buckets and tracked the progress of  
4 volumes from one category into the next,  
5 essentially starting at the exploration stage and  
6 working through to the proved reserves stage and  
7 eventually production, so I explained that. That  
8 was the purpose of my being there.

9 Anton Barendregt gave some -- gave a  
10 presentation, essentially giving his insights into  
11 the process of assuring compliance with, uh, with  
12 reserves estimation, and invited discussion from  
13 the floor on other people who had similar  
14 insights, but in terms of saying, oh, here are our  
15 guidelines and this is what they look like and  
16 this is how we do it, no, we didn't go into that  
17 level of detail.

18 Q Who had invited you to make the  
19 presentation?

20 A Again I'm very sorry. I can't recall  
21 his name. I believe it was a colleague working in  
22 Norske Hydro, who I had come into contact with  
23 through other business that I had with the Society  
24 of Petroleum Engineers at the time. Immediately  
25 previous to my job in The Hague, I had been

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 working in Denmark where I was one of the  
3 officials on the local chapter responsible for  
4 organizing programs of speakers to come to our  
5 monthly meetings that I referred to earlier, so I  
6 had arranged topics and speakers, and I believe I  
7 knew him from those days.

8 Q Did you discuss the invitation with  
9 anyone at Shell before the actual meeting?



10 A I don't specifically recall. I  
11 certainly -- my knowledge of the procedure would  
12 mean that I would have to at least tell somebody,  
13 but yeah, I don't recall any objection -- I don't  
14 recall specifically seeking the views of anyone on  
15 it.

16 Q After the meeting did you advise anyone  
17 in Shell of what had transpired during that  
18 meeting?

19 A Not that I recall. Do you have a  
20 specific --

21 Q I'm just curious if you sent an e-mail  
22 to anyone or you had an in-person conversation  
23 with someone about what had happened at the  
24 meeting, what was discussed, et cetera.

25 A I don't recall anything specifically.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q Now, going back to your answer, you said  
3 that you delivered a presentation where you talked  
4 about Shell's hydrocarbon classification system.

5 A Uh-huh.

6 Q At this time did the system include the  
7 VAR processes, the V-A-R process?

8 A No, because the system is a -- it's  
9 simply a system in which volumes of hydrocarbons  
10 are allocated into different categories, depending  
11 essentially on their level of maturity. So the  
12 "VAR process," as you referred to it, would be one  
13 of the determinants of which category a volume  
14 would be assigned to, but it wasn't part of the  
15 system as such.

16 Q The presentation that you gave; was this  
17 given to a large audience, or was it a much  
18 smaller group?

19 A Depends on what you mean by "large."

20 MR. TUTTLE: How big was the audience?

21 BY MR. HABER:

22 Q Let me ask: How large was the audience?

23 A Can I answer it with "in between." No,  
24 I would say there was about a hundred people  
25 there.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q Is it the type of presentation where you  
3 could field questions after the presentation?

4 A Yes.

5 Q Do you recall receiving any questions  
6 about your presentation?

7 A I know that there were questions. I  
8 can't remember specifically what the questions  
9 were.

10 Q Did you attend Mr. Barendregt's  
11 presentation?

12 A Yes.

13 Q And in your earlier testimony you said  
14 that essentially you had given insights into the  
15 process of assuring compliance with reserves  
16 estimation. Could you be a little more specific  
17 as to what Mr. Barendregt talked about.

18 A To the best of my recollection today --  
19 I haven't re-reviewed that presentation at all in  
20 the four years or so since it was made. My  
21 recollection today is that it was essentially  
22 pointing to difficulties that practitioners  
23 experienced in, in implementing the SEC rules. I  
24 mean there are numerous examples, "proved area"  
25 being one of them, establishing the proved area.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 I believe he was referring to the sort of problems  
3 that practitioners face in understanding what the  
4 SEC requires in those situations.

5 Q What is a proved area, for the record?

6 A That's a good question, and depending on  
7 who's sitting here, you might well get a different  
8 answer, but the proved area, according to -- there  
9 is a statement or a clause in the Regulation SX,  
10 the SEC's or FASB's definition of "proved  
11 reserves," which states that proved reserves can  
12 only be assigned to a proved area within a  
13 reservoir. Now, it offers no further guidance as  
14 to what a "proved area" is, and that is part of  
15 the problem of understanding what the rules mean,  
16 and certainly at the time there were many  
17 different opinions as to what was intended to be

18 meant by a "proved area."

19 Q Now, when you're referring to Regulation  
20 SX, are you referring to the SEC Rule 4-10?

21 A Yes.

22 Q Now, other than this meeting that we've  
23 been talking about, do you recall any other  
24 meetings of the SPE where reserves estimation and  
25 reporting were discussed?

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A Okay. I'm being very strict in thinking  
3 about answering the question, but I'll -- I don't  
4 know if it was an SPE organized event or not, but  
5 there was another event -- I'll elaborate anyway.  
6 There was another event which I attended in -- I  
7 think it was Houston, and I think that was  
8 organized by Ryder Scott, a consultancy firm,  
9 which was specifically targeted towards  
10 understanding how the implementation of the proved  
11 reserves regulations should proceed. And that was  
12 an event which Mr. Ron Harrell, the CEO of Ryder  
13 Scott was -- he's a very well-known figure within  
14 the business of reserves estimating, and he and  
15 his company had organized this and invited the two  
16 engineers from the SEC to come along and field  
17 questions from a very large audience, I would  
18 number between two or 300, of engineers working in  
19 the industry, and essentially it was a series of  
20 prepared questions which the SEC engineers were  
21 invited to give an opinion on. And these all were  
22 questions relating to uncertainty, unclarity as to  
23 how proved reserves should be estimated in  
24 different situations.

25 Q Do you recall when this event occurred?

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A I believe it was in 2003, but I couldn't  
3 be precise on that. It was either 2002 or 2003.  
4 I believe it was 2003.

5 Q Do you recall if it was -- let's just  
6 pick a season. Spring, summer, fall?

7 A I'm sorry. I'd have to consult my  
8 notes. No, I don't know.

9 Q And in your answer you said that the SEC  
10 consultants were invited to speak and give a  
11 presentation. Who are the two consultants you're  
12 referring to?

13 A Jim Murphy, and the other one -- I'm  
14 sorry, I can't remember his name, but there were  
15 only two at the time, engineers working for the  
16 SEC.

17 Q That actually makes two of us, because I  
18 can't remember his name either.

19 Do you recall what the two SEC  
20 consultants discussed?

21 MR. TUTTLE: Objection to the  
22 characterization as "consultants."

23 BY MR. HABER:

24 Q Mr. Murphy and the other person, and  
25 just for purposes of this questioning I'm going to  
0046

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 refer to Murphy and the other SEC consultant.

3 MR. TUTTLE: He said "engineers."

4 MR. HABER: Oh, okay. Engineers. I'm  
5 sorry. I apologize.

6 BY MR. HABER:

7 Q The SEC engineers; do you recall what  
8 the SEC engineers discussed?

9 A There were, I believe, seven cases  
10 presented to them for which they were invited to  
11 give an opinion. I can't remember the details of  
12 all of the cases, but I would characterize the  
13 meeting as in a conversational tone. I would say  
14 they, they were challenged by the experience.  
15 They found it difficult. They were receiving  
16 difficult questions that were difficult for them  
17 to answer, difficult to give clarity on from the  
18 audience, and my recollection is that they  
19 essentially stated that they would not be prepared  
20 to come to any future such meetings afterwards.

21 Q Now, was this a Shell-only meeting?

22 A No. I was there. I believe a colleague  
23 of mine, Rob Sidle, was there, and as far as I'm  
24 aware, we were only two from Shell out of the two  
25 or three hundred.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q And again as with the SPE meeting, were  
3 other members of the industry in attendance, such  
4 as Exxon, BP --

5 A Yeah, actually there was a poll taken of  
6 who was represented, and I think, yeah, a large  
7 proportion were from what you would call  
8 international oil companies, there was a large  
9 proportion from smaller independent companies,  
10 largely based in the U.S., and also a significant  
11 representation from consulting firms such as Ryder  
12 Scott and their competitors, who would be employed  
13 by companies to help them with their reserves  
14 estimates.

15 Q And at the time of this meeting do you  
16 know if Ryder Scott was doing any consulting work  
17 for Shell?

18 A I didn't know at the time whether or not  
19 they were. I don't know now whether or not they  
20 were at that time. I know that they have done in  
21 the past.

22 Q And what are the instances in which  
23 Ryder Scott has done work for Shell?

24 A Well, most recently they have been  
25 employed to assist in Shell's reserves estimation

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 process, but that's since the, since the  
3 recategorization. It's my understanding that  
4 prior to that they were commissioned to do  
5 occasional field studies by individual operating  
6 companies who might have a need for reserves  
7 certification for raising finance or  
8 what-have-you; not in relation to the company's  
9 reserves findings.

10 Q Do you know which operating units had  
11 retained Ryder Scott?

12 A No, and I didn't, I didn't make an  
13 inventory or attempt to make such an inventory.

14 Q Going back again to this conference that  
15 was hosted by Ryder Scott, do you know if Gaffney  
16 Cline was in attendance?

17 A No, I don't.

18 Q Do you know if Shell has ever retained  
19 Gaffney Cline as a consultant?

20 A Yes, I do know specifically that Gaffney  
21 Cline, prior to the recategorization, had been  
22 retained as a reserves consultant to do  
23 certification of reserves in the Sakhalin Field as  
24 part of the raising of finance for the Sakhalin  
25 development. That's the instance I know of. They

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 may well have been employed by other companies to  
3 do similar exercises, but I don't know those  
4 specifically.

5 Q What is the significance of "raising of  
6 finance"? I'm not sure I understand what you mean  
7 by that.

8 A Okay. Well, if you're developing a  
9 field or executing a project which requires a lot  
10 of capital investment, often the partners will  
11 agree that all or part of the financing, the money  
12 to finance the development will be raised in the  
13 open market, the financing market, from banks or  
14 often with the assistance of export credit  
15 agencies, usually government agencies that are  
16 interested in securing business for their own  
17 domiciled companies, engineering, manufacturing  
18 companies.

19 So if I liken it to buying a house,  
20 you're trying to raise a mortgage on your house,  
21 and if somebody is lending you money to buy the  
22 house, they want to have some assurance that the  
23 house is there, that it's not going to fall apart,  
24 that it is what it says it is and their investment  
25 is safe. So applying that analogy, often reserves

0050

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 consultants, such as Gaffney Cline and Ryder  
3 Scott, will be employed by the financing house to  
4 take an independent review of the resource base  
5 that is underpinning the project for which  
6 financing is sought, to pass an opinion on whether  
7 the reserves are there, the quality of the



8 reserves, the time frame over which they can be  
9 produced.

10 Q And the amount of financing that is  
11 sought; would that be typically found in the  
12 business plan of the operating unit?

13 A I don't know.

14 Q What is your understanding for the basis  
15 for which an operating unit would receive  
16 financing?

17 MR. TUTTLE: Object to the  
18 characterization.

19 THE WITNESS: Well, I'm not involved in  
20 that side of the business, so really I'm the wrong  
21 person to ask that. I don't know what criteria  
22 dictate whether a project is financed from  
23 internal resources or from external resources.

24 BY MR. HABER:

25 Q Okay, fair enough.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Again going back to this conference or  
3 event with Ryder Scott --

4 A Yeah.

5 Q -- where they hosted it, you said that  
6 there were seven cases that were discussed. Were  
7 any of these cases involving fields or  
8 developments that were operated by Shell?

9 A No.

10 Q Were any of these cases involving fields  
11 in which Shell was a partner, not the operator,  
12 but a partner?

13 A Not to my knowledge.

14 Q Okay.

15 MR. WEED: If you're through with that  
16 subject, we've been going a little more than an  
17 hour . . .

18 MR. HABER: I got a couple more  
19 follow-ups on this, and then we'll be done.

20 BY MR. HABER:

21 Q I believe the other SEC engineer's name  
22 is Winfrey. Does that ring a bell?

23 A Yes. Ron. Is it Ron?

24 Q That I don't know. I'm lucky I

25 remembered Winfrey.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Do you recall having any discussions  
3 with either Mr. Winfrey or Murphy about the SEC's  
4 positions regarding reserves reporting?

5 MR. TUTTLE: You mean at this meeting or  
6 otherwise?

7 BY MR. HABER:

8 Q At this meeting.

9 A At this meeting, no.

10 Q Now take it broader. Other than at this  
11 meeting, do you recall having any conversations?

12 A Starting late in 2002, the SEC issued at  
13 least one, possibly more than one, letter to all  
14 of the -- to many, many operating companies, of  
15 which Shell was one. I think at the time it  
16 appeared to us that the list of companies they had  
17 written this letter to comprised all of the  
18 companies which had assets in the Gulf of Mexico.

19 And the first of those letters -- so it  
20 was a general letter addressed to many companies.  
21 As far as we could determine, it was exactly the  
22 same letter that was sent to each of the companies  
23 concerned. Essentially it sought information as  
24 to the practices of companies estimating proved  
25 reserves, particularly in relation to whether or

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 not proved reserves had been assigned to fields  
3 without there being a production test; that is,  
4 the flow of hydrocarbons to surface.

5 So when a field discovery is made, the  
6 SEC engineers or the SEC as represented through  
7 these letters and through their advice that they  
8 published on the website and so forth, clearly had  
9 the view that it was necessary, when making a  
10 discovery, to actually produce hydrocarbons from  
11 the reservoir to the surface as a requirement for  
12 being able to book proved reserves.

13 I would characterize our view, the Shell  
14 internal view on that as being we felt that in  
15 many cases there would be a strong argument in



16 favor of that not being necessary, with the  
17 engineering techniques and data-gathering  
18 techniques that we have at our disposal in the  
19 industry today in the modern, what you might call  
20 the modern era, noting that the rules themselves  
21 were written in the seventies. It is often  
22 relatively easy to obtain information simply by  
23 measuring the properties of the rock and of the  
24 fluids contained in the rock with electronic  
25 devices or what-have-you. It is possible to  
0054

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 derive information from which it is clear that a  
3 rock will produce or not produce at economic  
4 rates.

5 Therefore, with production tests, the  
6 actual process of producing oil or gas to the  
7 surface being quite an expensive operation,  
8 obviously that is a cost that we would rather  
9 avoid, particularly when, from technical reasons,  
10 we feel it is unnecessary. So we had in various  
11 parts of the world -- there had been examples  
12 where we, we had not conducted a production test,  
13 because we felt it was not necessary, certainly  
14 not necessary in terms of our being confident to  
15 proceed with developments and development  
16 planning.

17 The SEC was seeking, through their  
18 letter, information on that type of practice,  
19 which I understand they had heard was reasonably  
20 wide-spread, and my recollection is that they  
21 received fairly overwhelming advice that indeed  
22 many, many, many operators consider it's not  
23 necessary to do a production test. So that would  
24 be an example of an area in which the rules say or  
25 imply one thing but actually operators find it  
0055

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 difficult, A, to either understand what is meant,  
3 or B, to justify the costs incurred in meeting the  
4 absolute letter of the regulations.

5 So that was the first round, and I think  
6 the consequence of that was something along the

7 lines that you must production-test unless you're  
8 in the Gulf of Mexico where it's not, you know,  
9 where it is now kind of -- or for a period of time  
10 there was a different, a sort of difference in  
11 approach advocated by the SEC, which, if the  
12 reservoir is in the Gulf of Mexico, it's not  
13 needed to be production-tested, whereas anywhere  
14 else in the world it is. Personally I struggle to  
15 see the logic in that, but it's another example  
16 where the rules are not necessarily clear to all.

17 There were follow-up letters seeking  
18 more information on the answers that were  
19 provided, and I think it was in one of the  
20 follow-up letters that the issue of lowest known  
21 hydrocarbons was raised and practices in  
22 determining what is the deepest point in the  
23 reservoir in which one can state with certainty  
24 that oil or gas exists.

25 The SEC stick to their -- again this is  
0056

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 not written in black and white in their  
3 regulations, but the SEC had an opinion that the  
4 deepest point that it was possible to register  
5 proved reserves would be the deepest point at  
6 which you had physically seen or measured the  
7 presence of hydrocarbons in the rock with a  
8 measuring device of which there are many different  
9 types.

10 We had a different opinion. We felt we  
11 had a strong case. I can go into the technical  
12 details, but we felt we had a very reasonable  
13 basis for using engineering data that we had at  
14 our disposal to justify booking reserves to a  
15 deeper level than had been specifically falling in  
16 the SEC interpretation. And myself and Ron Sidle  
17 made a visit to Washington to visit the SEC  
18 engineers to explain to them the technique that we  
19 felt was viable and to seek their views on it, as  
20 much in a way of trying to stimulate the  
21 discussion and bring to the attention of the  
22 engineers techniques that we thought were entirely  
23 consistent with the intent of the SEC rules. So

24 we came, made a one-day visit to the office down  
25 the road. We had a three or four-hour meeting  
0057

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 with them, we presented our views, and I think  
3 ultimately the engineers were not persuaded by our  
4 argument, but it was, it was, we thought, worth  
5 bringing to the attention of the engineers this  
6 particular technique that we, we used.

7 Q Okay. I could probably follow up and we  
8 could go another 20 or 30 minutes, so why don't we  
9 take a break now, and then I'll ask you some more  
10 questions about this topic.

11 A Okay.

12 THE VIDEOGRAPHER: We are going off the  
13 record. The time is 11:14 a.m.

14 (Whereupon, a short recess was taken.)

15 THE VIDEOGRAPHER: We are back on the  
16 record. The time is 11:31 a.m.

17 BY MR. HABER:

18 Q Mr. Pay, the discussion we were having  
19 right before the break had to do with  
20 communications, whether it be in person or  
21 otherwise, with the SEC engineers, and you  
22 identified two instances. The last one I believe  
23 had to do with the lowest known hydrocarbon issue,  
24 the first one being with regard to production  
25 flow, I believe it was.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A Production test.

3 Q Production testing in the Gulf of  
4 Mexico. You explained the issue with regard to  
5 the Gulf of Mexico.

6 A Uh-huh.

7 Q Did you have, you personally have  
8 communications with the SEC engineers on this  
9 issue?

10 MR. TUTTLE: The production test issue?

11 BY MR. HABER:

12 Q Yeah, production test issue in the Gulf  
13 of Mexico.

14 A If by "personal communication" you mean

15 did I have a meeting or a telephone

16 conversation --

17 Q Yes.

18 A -- not that I recall. We -- as a

19 company, we drafted a letter, and obviously I was

20 heavily involved in drafting that letter in

21 response to the letter that the SEC had written to

22 us, so it was corporate communication, I would

23 say.

24

25

0059

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2 (Exhibit No. 1 was marked for

3 identification and attached to the deposition

4 transcript.)

5 BY MR. HABER:

6 Q Mr. Pay, I'd just ask you to take a look

7 at this document very briefly while I identify it

8 for the record.

9 For the record, it's a two-page letter

10 with an attachment. It's from a Tim Morrison to

11 an H. Roger Schwall. It's dated October 31, 2002.

12 Its Bates Numbers are SEC00715 to SEC00727.

13 Mr. Pay, have you seen this document

14 before today?

15 A Yes. I was quite extensively involved

16 in writing it.

17 Q And is this the letter that you were

18 just referring to in your testimony?

19 A This is our response to the first letter

20 we received from the SEC.

21 Q And when you say that you were

22 "involved" in working on this letter, can you

23 explain for the record what your involvement was.

24 A Well, there are a number of factual

25 statements made here in relation to -- in answer

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 to specific questions that had been asked by the

3 SEC in a general letter, and essentially I took

4 the role of -- I didn't have all the answers in my

5 head at the time, but I would ask questions of --

6 seek data from the individual operating companies  
7 where you see the results of specific areas, such  
8 as United States, Brunei, Malaysia, et cetera, so  
9 I would have issued an inquiry to all of our  
10 operating companies, asking for examples of proved  
11 reserves booking without production flow data. I  
12 sent an inquiry to all our operating companies  
13 saying, well, do you have any examples of this,  
14 and the answers I received back are summarized in  
15 this letter here, along with answers to the other  
16 points, so . . .

17 Q Who asked you to work on preparing this  
18 letter?

19 A I don't recall specifically, but it's  
20 entirely consistent that it would come to my desk.  
21 I mean my job would be to deal with matters such  
22 as this.

23 Q When you say your job would be to deal  
24 with matters such as this, are you referring to  
25 compliance and/or regulatory matters?

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A Questions in relation to our reserves  
3 booking.

4 Q Was there a different reporting line  
5 that was responsible for compliance with  
6 regulatory requirements?

7 A No.

8 Q Was it the function of the GRC, the  
9 Group Reserves Coordinator, to ensure compliance  
10 with regulatory requirements regarding reserves?

11 A Part of my role was to ensure -- and  
12 here I would say in consultation with the Reserves  
13 Auditor -- that the guidelines we had in place  
14 were a good faith representation of our  
15 understanding of the SEC requirements.

16 Q Was there anyone who you worked with who  
17 was charged with specifically focusing on the SEC  
18 reserves reporting requirements and ensuring that  
19 Shell was complying with those requirements?

20 A Apart from the Group Reserves Auditor,  
21 no.

22 Q And I believe earlier you testified that

23 in that regard it was more of an interpretation of  
24 the SEC requirements to make them fit within  
25 Shell's operating needs.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 MR. TUTTLE: Objection to that  
3 characterization.

4 BY MR. HABER:

5 Q Is that correct?

6 MR. TUTTLE: Same objection.

7 THE WITNESS: If I understand you  
8 correctly, your question correctly, I'll answer  
9 what I think you're saying, and that is that it is  
10 correct to say that the SEC rules cannot just --  
11 you cannot just give the SEC rules to an engineer  
12 and say, here, implement these. It is not a  
13 recipe book, a cookbook for generating estimates.

14 A lot of what you might call "interpretation" is  
15 required to translate what is written in the rules  
16 into the specific actions that you would take as  
17 an engineer working at your desk in relation to  
18 generating a reserves estimate. That's both --

19 BY MR. HABER:

20 Q I'm sorry.

21 A That's both in terms of the calculation  
22 of the volume and also in terms of characterizing  
23 whether or not the reserve volume is sufficiently  
24 mature, sufficiently well defined, sufficiently  
25 commercially defined to qualify as a proved

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2 reserve as we understand the meaning of the rules  
3 to imply.

4 So the guidelines, as they were updated,  
5 attempted to translate what we understood the  
6 requirements to be into a more specific series of  
7 instructions and criteria so the people in the  
8 business upon whom we relied to generate the  
9 estimates would be able to understand better and  
10 more -- and consistently across the group what we  
11 as a group understood the requirements to be.

12 Q In connection with the meeting that you  
13 and Mr. Sidle went to with the SEC engineers, did



14 you have any discussions with Mr. Winfrey and  
15 Murphy about generally the SEC's reserves  
16 reporting requirements?

17 A I don't recall that we had any  
18 discussion other than on the two specific topics  
19 we were there to discuss.

20 Q As I recall, I think you testified one  
21 topic was the lowest known hydrocarbon issue.  
22 What was the other topic?

23 A The use of seismic data and also  
24 estimating the depth of the lowest known  
25 hydrocarbon.

0064

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q Do you recall what the SEC's position  
3 was with regard to the use of seismic data for  
4 estimating the depth of the lowest known  
5 hydrocarbon?

6 A Certainly I recall Mr. Winfrey in  
7 particular was very interested in the information  
8 we presented to him and his colleagues. I believe  
9 we, we left with them a paper detailing an  
10 approach that was used in, in the Gulf of Mexico  
11 fields, and that paper described how it was  
12 determined that that gave the required level of  
13 certainty, reasonable certainty as to the depth of  
14 the lowest known hydrocarbon. Mr. Winfrey, in  
15 particular, expressed interest in the paper and  
16 asked many questions about the technique that was  
17 made but subsequently I believe informed us that  
18 whilst the technique might have merit, it still  
19 did not comply with the SEC as he understood them.

20 Q Did he give an explanation as to why  
21 they did not comply with the SEC rules?

22 A I don't believe he did, other than to  
23 explain that seismic data was not acceptable  
24 generally.

25 Q Now, looking at Exhibit 1 for a moment,

0065

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 who is Mr. Morrison? I do see it says "Group  
3 Controller," but what was his function as Group  
4 Controller?

5 A I don't know what his precise job  
6 description entails, but as Group Controller he --  
7 my understanding is that he was in, in charge of  
8 the external reporting of financial accounts,  
9 among, I'm sure, many other things.

10 Q Do you know if his line -- which I guess  
11 would be the financial group; is that correct?

12 A I don't know.

13 Q Okay. Do you know if he was responsible  
14 for communicating with regulators such as the SEC?

15 A I don't know if that was specifically  
16 his responsibility.

17 Q Did anyone assist you in preparing this  
18 letter?

19 A Well, of course, I already mentioned  
20 that I sent out inquiries to all of our operating  
21 companies seeking information, so all of them will  
22 have assisted through the provision of data in one  
23 form or another. Specifically in relation to the  
24 paper that's attached here, that was brought to my  
25 attention by Rod Sidle, who worked in the U.S.

0066

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q You mentioned Rod Sidle a couple of  
3 times this morning. Who was Rod Sidle?

4 A Rod Sidle was the Reserves Manager of  
5 SEPCO, which is a U.S. operating company, and  
6 first came to my attention shortly after I took  
7 the job of Group Reserves Coordinator as being,  
8 shall we say, one of the experts in the company in  
9 relation to proved reserves estimating.

10 Q And did you find that he had an  
11 expertise with regard to proved reserves  
12 estimation?

13 A I found that he was very knowledgable.

14 Q Was he a resource that you called upon  
15 with questions with regard to compliance issues?

16 A Yes.

17 Q Other than Mr. Sidle, was there anyone  
18 else that you called upon for advice or to have  
19 questions answered with regard to compliance  
20 issues?

21 MR. TUTTLE: Objection to form.



22 THE WITNESS: Well, not on a routine

23 basis. I mean questions -- no. If I had a

24 question on any particular aspect of proved

25 reserves definitions, I tended to discuss it with

0067

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Rob.

3 BY MR. HABER:

4 Q And really all my question was focused

5 on was: Other than Mr. Sidle, was there anyone

6 else that you, you went to?

7 A Not for detailed technical advice, no.

8 Q Other than technical advice, did you

9 find Mr. Sidle to have knowledge about the SEC's

10 reserves reporting requirements?

11 A I found him to be knowledgeable -- yes, I

12 found him to be knowledgeable about the way SEPCO

13 interpreted the SEC's reporting requirements.

14 Q Was there a difference between the way

15 SEPCO interpreted the SEC reporting requirements

16 and the group, independent of SEPCO, the way they

17 interpreted the requirements?

18 A There were some instances where

19 practices did differ, and it was largely in

20 investigating the reasons for those differences in

21 practice that, that would stimulate some of the

22 questions that I had to Mr. Sidle, of which the

23 most significant, I would say, was the -- it was

24 the manner in which "proved area," which we

25 discussed before, ought to be calculated or

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 assigned.

3 Q And do you recall what information

4 Mr. Sidle had given you in that connection?

5 A Mr. Sidle -- if I summarize the

6 information he gave me -- indicated that it was

7 common practice in the U.S. to assign an arbitrary

8 one-square-mile box area around the well and call

9 that the proved area. I was interested in this

10 but have to confess that my initial reaction was

11 that, through the arbitrariness of that approach,

12 I did not immediately warm to it as a technically

13 defensible approach.

14 Q Did you ultimately warm to it?

15 A From a personal point of view, I still  
16 think it is arbitrary.

17 Q But in your capacity as Group Reserves  
18 Coordinator --

19 A I now understand that it is an approach  
20 that is common. As an engineer, I hold the  
21 personal opinion that it makes little sense.

22 Q Was this an approach that the larger  
23 group of Shell adopted in the guidelines?

24 A It was news to me when I discovered that  
25 this was the approach that was common in the U.S.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 and it was not an approach that was found in the  
3 wider group guidelines.

4 Q Did it ultimately find its way into the  
5 group's guidelines?

6 A Not during the time that I was doing the  
7 job. I believe the guidelines had been amended in  
8 that direction since I left the job.

9 Q And when did you leave the position as  
10 Group Reserves Coordinator?

11 A June 2004.

12 Q Now, in connection with the  
13 recategorization, do you know if there were any  
14 reserves that were recategorized because of proved  
15 area definitions?

16 A There was some, yes.

17 Q And which fields were recategorized?

18 A I'm not sure I can remember in such  
19 detail. I don't recall the volume being a large  
20 component of the total volume. I would -- in my  
21 head today I have a hundred million barrels out of  
22 the total of four or five billion that was  
23 recategorized. The only field that I can recall  
24 as having an extensive discussion on that topic  
25 was the Norway Ormen Lange Field where we had

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 considerable difference of opinion internally as  
3 to how to the proved area ought to be set. We

4 were at that time employing Ryder Scott to help us  
5 with our recategorization efforts, and their  
6 opinions also differed from ours.

7 I found it interesting to note that of  
8 the information that came to light subsequently of  
9 the several operators in that field, it would seem  
10 that everybody was having similar types of  
11 difficulties, because the range in proved reserves  
12 that were filed by different operators in the  
13 field had a factor from the lowest to the highest  
14 on the order of three. So it seemed that  
15 everybody was struggling to understand what a  
16 reasonable application of the proved area  
17 definition ought to be.

18 Q Were there other reasons why the  
19 reserves in Ormen Lange had been recategorized?

20 A No. I think that one was purely an  
21 issue of proved area definition.

22 Q And do you recall when the reserves had  
23 been booked?

24 A They were already on the books. By the  
25 time the recategorization occurred, the project

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 had been sanctioned, as I recall, so it was a  
3 legitimate reserves booking as of the date it  
4 was -- of the recategorization. I believe that in  
5 the restatement of earlier years' findings,  
6 however, the earlier bookings were removed from  
7 the earlier years.

8 Q And when you say the project had been  
9 "sanctioned," are you referring to the fact that  
10 the project had reached FID?

11 A FID, Final Investment Decision, is a  
12 term that we use to imply that all internal  
13 approvals have been secured for proceeding with  
14 the investment.

15 Q And "FID"; is that an industry term or  
16 just a Shell term?

17 A At the time I understood it to be  
18 peculiar to Shell. It was more common to hear the  
19 term "project sanction" used within the industry.

20 Q Coming back to your communications with

21 Mr. Sidle and where practices differed between the  
22 United States and the group as a whole, you  
23 identified the proved area, were there other  
24 practices that you can recall having discussed  
25 with Mr. Sidle?

0072

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A Certainly lowest known hydrocarbon and  
3 the assessment of lowest known hydrocarbon was  
4 another area. The requirement for production  
5 testing. A lot of the discussion that I had with  
6 Mr. Sidle stemmed precisely from these letters  
7 that we received from the SEC, so to that extent,  
8 it was almost the nature of the SEC letters which  
9 dictated the topics that I discussed with  
10 Mr. Sidle.

11 Q Uh-huh. Can you think of any other  
12 reasons why you spoke with Mr. Sidle with regard  
13 to reserves estimating?

14 A I'm not sure what you mean by your  
15 question.

16 Q Well, I just don't want to, you know,  
17 make the question so broad where counsel would  
18 object because it could include a "hi, how are  
19 you, John," kind of call, so I'm talking really  
20 with regard to reserves estimation and  
21 categorization.

22 A A piece of ice just fell off the window.  
23 I thought it was a body.

24 No. Well, I'm not sure I exactly  
25 understand where you're driving at with your

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 question, but I think my understanding of an  
3 appropriate response would be that I found Rod  
4 Sidle -- I found Rod to be knowledgeable, an  
5 experienced practitioner in the field of reserves  
6 estimating, as was evidenced by the fact that he  
7 managed the process for SEPCO. He is a very  
8 personable, likable person. I got on well with  
9 him, and therefore I cultivated -- or what evolved  
10 was a kind of social/professional relationship  
11 where I looked to him for advice just to discuss

12 ideas with from time to time.

13 Does that help to answer your question?

14 Q It does. Did there come a time when  
15 SEPCO ceased reporting separately to the SEC and  
16 became subsumed within the group's reporting?

17 A Yes. Don't test me on exactly the  
18 history of that, but certainly through my career,  
19 prior to taking on the job of Reserves  
20 Coordinator, it was clear that the group, for  
21 whatever reason, had a requirement that Shell Oil  
22 must be treated as almost an entire separate  
23 entity. This was up until I believe 1996 or so.  
24 It was almost as if Shell Oil was a separate  
25 company to the rest of the group. I remember  
0074

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 people would actually be reprimanded if they had  
3 direct contact with, with Shell Oil people.

4 So certainly for a long time in the  
5 past, Shell Oil was a separate registrant. By the  
6 time I took the job, Shell Oil's findings were  
7 already -- "subsumed" I think was the word you  
8 used -- in the group's reporting, and that flowed  
9 certainly from 1996 onwards. That restriction on  
10 Shell Oil interactions was removed, and people  
11 from the States began appearing on postings around  
12 the world, and people were posted to the States  
13 from Europe, et cetera. So that restriction, for  
14 whatever reason it had been in place, was lifted,  
15 and certainly by the time I came into the job in  
16 2002, all of the group's reporting, as far as I  
17 could determined, had been amalgamated.

18 Q Now, with regard to this meeting that  
19 you and Mr. Sidle went to with Mr. Winfrey and  
20 Mr. Murphy, when you came back from that meeting  
21 did you report to anyone about what had transpired  
22 during that meeting?

23 A I can't remember specifically doing so.

24 Q Do you recall if you reduced to writing  
25 the substance of the meeting; that is, make a memo

0075

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 to the file or send an e-mail?

3 A I don't recall if I did. Obviously it  
4 would surprise me if I didn't, but I can't recall  
5 sitting and typing -- I can't recall a specific  
6 e-mail that I would have written, sitting here  
7 today.

8 Q Who did you report to during your tenure  
9 as GRC?

10 A My immediate reporting line was to Jaap  
11 Nauta, N-A-U-T-A. He reported to Malcolm Harper,  
12 who reported to Lorin Brass.

13 Q Do you recall discussing with either  
14 Mr. Nauta, Mr. Harper or Mr. Brass the substance  
15 of what had transpired during that meeting with  
16 the SEC engineers?

17 A I don't recall any specific  
18 conversations, no.

19 Q And again I think I asked this, but do  
20 you recall when that meeting occurred when you  
21 came to Washington?

22 A I guess it would be in the -- I don't  
23 recall specifically, but it was in 2003, probably  
24 the early part of 2003.

25 Q And do you know if any reserves had been  
0076

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 recategorized as a result of the lowest known  
3 hydrocarbon issue?

4 A At that time?

5 Q Well, reserves that were recategorized  
6 in 2004.

7 A Yes, there was an element in there --  
8 again, if I remember correctly, it was in the  
9 order of a hundred million barrels.

10 Q Were there any particular operating  
11 units for which the lowest known hydrocarbon issue  
12 resulted in the recategorization?

13 A There were several. Sitting here today,  
14 I can't tell you specifically which ones they  
15 might have been.

16 Q Are there documents that I could --

17 A Yeah, it would be in the record, yeah.

18 Q Do you have any understanding which  
19 documents specifically would provide that



20 information?

21 A As part of the effort to compile data  
22 for the recategorization, we sent information  
23 requests to every operating unit, asking them to  
24 provide us with the volumes that were required to  
25 be recategorized under the LKH criterion. And so  
0077

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 the record of which operating units and in what  
3 quantities certainly are stored, should I say, in  
4 digital form in the returns for that information,  
5 so the information I'm sure is available. Whether  
6 it was actually written down as a table in a  
7 report, I'm not so sure. I seem to recall that it  
8 was, but I couldn't necessarily put my hand today  
9 on that particular report.

10 Q All right. Now, when you say that we  
11 sent information requesting from the operating  
12 units the information, who is the "we"?

13 A Me and my colleagues helping me with the  
14 reserves, the compilation of the numbers.

15 Q Was this in connection with Project  
16 Rockford?

17 A Yes.

18 Q And you were a member of the Project  
19 Rockford team?

20 A Yes.

21 Q We'll discuss Project Rockford later.

22 This is probably a good time to start  
23 with your CV. You mentioned earlier you had this  
24 training when you got -- when you first started in  
25 Shell.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A Yep.

3 Q If you can take me from that point when  
4 the training began through where you are today.

5 A Okay. That initial period of training  
6 lasted until I think May 2000 -- not 2000.  
7 May 1985. So that was a general induction program  
8 that all of the new graduates went through at the  
9 time to bring them to the level required for their  
10 first assignment, which in my case was to the



11 United Kingdom, where I spent two years working  
12 offshore on drilling rigs as a well site petroleum  
13 engineer responsible for gathering data related to  
14 the drilling of the wells.

15 After doing that I moved into the office  
16 in the UK and took a job in the Lowestoft office  
17 -- L-O -- is it relevant?

18 Q Probably not.

19 A No? Took a job onshore in one of the  
20 operating bases in the UK, dealing with -- as a  
21 reservoir engineer, looking at managing and  
22 optimizing the performance of wells and  
23 reservoirs.

24 Q How long were you in that position?

25 A Three or four years.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q So that takes us roughly to '91?

3 A Yeah. So in early '91 I took a job in  
4 the Central Office in The Hague in the -- in a  
5 technical services group, again working as a  
6 reservoir engineer where my job consisted of  
7 undertaking small, short-duration studies into  
8 reservoir performance or reservoir development  
9 planning on behalf of numerous operating companies  
10 around the world. And so then, as today, that  
11 central pool of expertise was used as a kind of  
12 peak shaver, so if there was not sufficient  
13 manpower available to do a particular study in an  
14 operating unit at a particular point in time, they  
15 could draw on the central pool of people to  
16 assist. So I did many different studies around  
17 the world on many different assets, essentially  
18 acting as an internal consultant, you might say.

19 After two years doing that, I was  
20 offered a job in the group's training facility in  
21 Holland, so back to the Training Center, this time  
22 as a lecturer rather than as a student, where I  
23 delivered training on reservoir engineering.

24 Q Did you -- during that time -- if I can  
25 just interrupt the CV for a moment. As a

0080

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2 lecturer, did you ever teach any course work or --  
3 withdrawn. Let me start over again. As a  
4 lecturer, did you ever teach reserves estimations  
5 and categorizations pursuant to the SEC reporting  
6 requirements?

7 A By the time I became a lecturer, the  
8 pool of material that we delivered on the courses  
9 had not substantially changed from the material  
10 that I received when I was undergoing training a  
11 few years previously, so I basically delivered the  
12 course as I had received it.

13 Q So that course then included some  
14 portion of reserves estimation under SEC  
15 requirements?

16 A The way it was represented on the course  
17 was the way it had been represented to me when I  
18 was receiving the training, and I would  
19 characterize as -- it was taken as a matter of  
20 common knowledge within the group that the, the  
21 way in which the group estimated its proved  
22 reserves for internal purposes was consistent with  
23 the requirements of the SEC rules.

24 Q So you didn't go beyond --

25 A No.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q -- that; is that correct?

3 A No.

4 Q What other general areas did you lecture  
5 on?

6 A I didn't lecture on anything other than  
7 reservoir engineering.

8 Q Okay. Did any of the reservoir  
9 engineering also include business planning?

10 A No, not at that time.

11 Q When you went through the training, did  
12 you receive any course work on business planning?

13 A No.

14 Q Okay. How long were you giving the  
15 training?

16 A Two and a half years, roughly, bringing  
17 me up to 1995. In 1995 I took a job in Brunei  
18 where I was Section Head for a team of engineers,

19 again working on the day-to-day optimization of  
20 well and reservoir performance for our assets in  
21 Brunei. I did that for three years.

22 Q Did any of your responsibilities in  
23 Brunei include the reporting of proved reserves?

24 A Yes. My team was charged with the  
25 estimating of proved developed reserves. Since we  
0082

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 were, we were dealing with the day-to-day  
3 management of producing oil and gas reservoirs --  
4 in other words, ones that had been developed -- my  
5 engineers and therefore my section was responsible  
6 for producing the proved developed reserves  
7 estimate for those reservoirs.

8 Q And in producing the proved developed  
9 reserves estimate, was that information  
10 communicated to the Hague as part of the ARPR  
11 process?

12 A My understanding is that it was, not  
13 directly by me, but I would feed that information  
14 into the person compiling the whole resource  
15 estimate for Brunei, who would incorporate that  
16 information into the, the report that was made to,  
17 to The Hague.

18 Q Who's responsible in Brunei for  
19 submitting the report to the Hague?

20 A Well, there was a, a focal point who is  
21 required -- whose job it was to compile the data,  
22 but as in all operating units, the actual data  
23 report would be signed off by a senior financial  
24 manager and a senior technical manager within the  
25 company.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q You say you were there for about three  
3 years?

4 A Uh-huh.

5 Q Do you recall who the senior financial  
6 manager and senior technical manager were who did  
7 the signoff?

8 A I don't know who signed the reports in  
9 Brunei. I never saw that.

10 Q Are you aware of a term "legacy  
11 reserves"?

12 A Yes.

13 Q What is a legacy reserve?

14 A Specifically -- specifically in relation  
15 to Brunei, I became aware, when I took the job in  
16 The Hague in 2002, that Brunei had historically  
17 booked reserves which it had viewed -- come to  
18 view as no longer being compliant with the  
19 requirements of proved, proved reserves.

20 Q Which -- I'm sorry. Go ahead. I was  
21 going to say: Which requirements of proved  
22 reserves are you referring to?

23 A I don't know.

24 Q Would that be technical maturity?

25 A I don't know.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q Commercial maturity?

3 A I've answered your question.

4 Q I'm just trying to refresh your  
5 recollection. That's all.

6 A Reserves volumes that, for whatever  
7 reason, no longer met the guidance that were  
8 issued on proved reserves definition. I didn't  
9 know any more details than that.

10 Q And so when you're referring to "the  
11 guidance," you're referring to Shell's guidelines,  
12 correct?

13 A Yes.

14 Q Okay. While you were at Brunei, do you  
15 recall this legacy reserves being an issue?

16 A No.

17 Q Do you know when legacy reserves became  
18 an issue in Brunei?

19 A I understand that while I was there it  
20 was identified as an issue, but while I was in  
21 Brunei it was never brought to my particular  
22 attention. It was mostly in relation to  
23 undeveloped reserves, and as I've said, my  
24 responsibility at the time did not extend as far  
25 as undeveloped reserves.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q And when you say that your understanding  
3 is that while you were there it was identified as  
4 an issue, do you know who identified the legacy  
5 reserves as an issue?

6 A No.

7 Q Do you know if the issue had risen to  
8 the level of the ExCom? Again we're talking about  
9 while you were there.

10 MR. TUTTLE: In Brunei?

11 BY MR. HABER:

12 Q Yes, in Brunei.

13 A I have no idea.

14 Q Once you became the Group Reserves  
15 Coordinator, do you know if the legacy reserves  
16 issue had risen to the level of the ExCom?

17 A I, myself, mentioned it in documents  
18 that I prepared for ExCom. Whether that was the  
19 first time they heard it or not, I don't know.

20 Q We're going to get into more depth of  
21 discussion with regard to the legacy reserves.

22 After -- withdrawn. What was your  
23 position while you were in Brunei? What was the  
24 title of your position?

25 A I was the head of reservoir operations

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 for the western assets.

3 Q And was that the position that you held  
4 through the three-some years?

5 A Yes.

6 Q After Brunei where did you go?

7 A I went from Brunei to Denmark. My job  
8 title there was Exploration and Production  
9 Business Consultant, which sounds very grand, as  
10 many of these things do. Essentially it consisted  
11 of representing or assisting my supervisor at the  
12 time, Jan-Willem Roosch, to represent Shell in a  
13 joint venture in which we were involved in  
14 Denmark, which we had a non-operating partner.  
15 The operator there is Maersk Oil and Gas,  
16 M-A-E-R-S-K. So the operator of the assets in  
17 Denmark is Maersk, and we're a non-operating

18 partner, and the job -- it's a very small office.  
19 There were only two technical people, myself and  
20 Jan-Willem Roosch. We had a finance assistant and  
21 a business analyst.

22 Essentially what we did was to represent  
23 Shell's interests in the venture and to assist in  
24 budget allocations for any development projects,  
25 so on and so forth. That's in terms of a

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 relationship with Maersk. Also part of the job  
3 was also to represent the plans that Maersk was  
4 charged with developing, to represent those into  
5 the group's -- the Shell Group's business plan, so  
6 to ensure that the appropriate information on the  
7 future requirements for the business in Denmark  
8 were fed back into the group's business plan  
9 process so we would know how much capital  
10 investment they would require, how much production  
11 to expect. And as part of that, I compiled the,  
12 the reserves reports for Denmark as well.

13 Q Was this position the first position  
14 where you had responsibility for business  
15 planning?

16 A Yes.

17 Q Prior to this point, did you receive any  
18 training on business planning?

19 A No.

20 Q I take it it was on-the-job training?

21 MR. TUTTLE: Objection to form.

22 THE WITNESS: Well, yes, but then it's  
23 not something that I would expect to receive  
24 training on, necessarily, since it comprises  
25 compilation of data into a form that is fairly

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 self-evident in terms of how -- what the data is  
3 required for and in what format it is required to  
4 be compiled, and as such, the nature of the data,  
5 the data I was dealing with was, of course, data  
6 that I was not totally unfamiliar with.

7 I was very used to working with capital  
8 estimates, operating expenditure estimates,

9 forecasts of production and so on and so forth,  
10 and really it represented compiling that  
11 information into a format suitable for compilation  
12 into the larger business plan.

13 Now, the process of how -- so you used  
14 the term "business planning." I would say it was  
15 more contributing to the process of business  
16 planning, because whatever processes would go on  
17 in the Center around allocating funds to different  
18 projects, determining which, which of the many  
19 projects available would be selected for going  
20 forward and which would not, that was not a  
21 process that I was very deeply involved with.

22 BY MR. HABER:

23 Q Now, you mentioned that you had  
24 responsibility with regard to submitting proved  
25 reserve estimates to the Center?

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2 A Uh-huh.

3 Q Can you just give me a little bit more  
4 information as to what that entailed.

5 A So each year we would usually receive an  
6 update to the group's guidelines, group's reserves  
7 reporting guidelines, which would cover proved  
8 reserves requirements also, as well as  
9 requirements of reporting volumes in every other  
10 category in the classification system that we were  
11 speaking about earlier, and my job would be to  
12 read and absorb those guidelines, understand them,  
13 and then apply the, those guidelines to the  
14 volumes that we estimated to be available within  
15 the business in Denmark.

16 Some of that would be undiscovered  
17 volumes that had yet to be drilled for and  
18 explored for, ranging all the way to a statement  
19 of actual production for the year and the proved  
20 reserves figures as of the end of the year.

21 Q And between you and Mr. Roosch, who  
22 actually signed off on the proved reserves  
23 submissions that went to the Center?

24 A Mr. Roosch would have signed off.

25 MR. HABER: I don't know if this would



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2 be a good time to check the lunch, but we have to  
3 change the tape, so --

4 MR. FERRARA: The lunch will be  
5 delivered at 12:30.

6 MR. HABER: If you don't mind, we'll  
7 just sit here, change the tapes, and then go on  
8 another ten minutes or so.

9 THE VIDEOGRAPHER: This marks the end of  
10 Tape 1 of the deposition of Mr. Pay. We are going  
11 off the record. The time is 12:18 p.m.

12 (Whereupon, a short recess was taken.)

13 THE VIDEOGRAPHER: This marks the  
14 beginning of Tape 2 in the deposition of Mr. Pay.  
15 We are back on the record. The time is 12:19 p.m.

16 BY MR. HABER:

17 Q Mr. Pay, if we could just go back to  
18 your tenure in Brunei for a moment, how would you  
19 characterize the relationship between Shell and  
20 the Brunei government during your tenure?

21 A As I experienced it, it was highly  
22 confrontational. There were numerous technical  
23 matters related to field development which the  
24 representatives of the Brunei government took  
25 exception to, I would still say today, in an

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2 unreasonable fashion. To quote an example, at the  
3 time the Brunei government or the Petroleum Unit,  
4 which was the entity that looked after the Brunei  
5 government's 50 percent interest in the Brunei  
6 assets, so a partner, in essence, in the  
7 developments, they employed a consultant upon whom  
8 it was evident they relied considerably for  
9 technical expertise.

10 The problem that we had with that  
11 particular individual was that his education  
12 appeared to have stopped in the 1950s, and  
13 therefore he advocated practices and techniques  
14 that really were outdated. And so most of the  
15 discussion and tension that we had with this  
16 particular individual was in relation to trying to

17 persuade him and, therefore, the Brunei government  
18 that more modern techniques were appropriate for  
19 use in oil and gas field development.

20 Q Were you ultimately successful in  
21 convincing them?

22 A Yes. He was removed from his position  
23 while I was in Brunei.

24 Q Would you say that the relationship with  
25 the Brunei government remained confrontational

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 when you became Group Reserves Coordinator?

3 A I have no idea what the nature of the  
4 relationship was, and I wasn't directly involved  
5 with it.

6 Q Did anyone in the Brunei operating unit  
7 ever communicate such a sentiment?

8 A Not in those terms, no.

9 Q How about in other terms; did anyone  
10 describe the relationship that the Brunei  
11 operating unit had with the government?

12 A Well, we were discussing earlier the  
13 legacy volume, and I would say this is the only  
14 instance in which any kind of feedback of the  
15 nature that you are hinting at was presented to  
16 me. The issue with the "legacy volumes," as they  
17 were referred to in Brunei, was that there was  
18 this overstatement of reserves that was  
19 recognized, and it was determined that there was  
20 sensitivity in reporting reserves reductions with  
21 the Brunei government.

22 It was, for reasons that I don't -- I  
23 can't tell you, because I don't know, seemed to be  
24 a difficult matter to raise with the Brunei  
25 government to reduce previously stated reserve

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 volumes. So an approach had been taken -- which I  
3 found to be reasonable in the context -- in which  
4 those legacy volumes would be removed from the  
5 books over a period of time rather than in one  
6 single action. And by the time I arrived in the  
7 job of Reserves Coordinator in 2002, the remaining

8 balance of reserves sought to be removed had been  
9 reduced to a very small number, 20 million  
10 barrels, I think.

11 Q And were there reserves recategorized as  
12 part of Shell's recategorization of reserves?

13 A In the restatements that were made, yes,  
14 we did include Brunei in that one.

15 Q During your time in Brunei, you  
16 described the relationship with the Brunei  
17 government as "highly confrontational." Do you  
18 recall there being a time when the Brunei  
19 government fined Shell for whatever reason?

20 A There is an incident which I'm wondering  
21 whether I should mention in response to your  
22 question, but I couldn't characterize that as a  
23 fine. There was an incident where, as I -- as the  
24 story was presented to me, it was an issue of  
25 compensation.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q Was it individual compensation that  
3 you're referring to, or was it compensation that  
4 was owed to the Brunei government?

5 A Okay, the incident I recall is one in  
6 which the Brunei government disagreed with a  
7 particular development plan that we had proposed  
8 and subsequently implemented, and they claimed a  
9 cash payment in compensation for value that they  
10 considered had been put at risk.

11 Q And did Shell make that payment?

12 A As far as I'm aware, yes.

13 Q Do you recall how much?

14 A I believe it was \$70 million.

15 Q And what was the basis for the claimed  
16 payment?

17 A The Brunei government and their  
18 representatives claimed that through executing a  
19 particular development plan, oil production in a  
20 gas -- in a reservoir had been reduced. I wasn't  
21 involved in the technical discussions around that  
22 particular case, but my understanding is that the  
23 Shell view of the same issue was that actually no  
24 value had been so jeopardized and that, moreover,

25 value had been realized through enabling

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 production of large quantities of gas from the  
3 same reservoir.

4 So essentially our view was that the oil  
5 production was at its economic end, and it was now  
6 time to produce the gas from the reservoir, which  
7 we proceeded to do. The Brunei government took  
8 the view that the oil production was not at an end  
9 as we had claimed, and made a claim in relation to  
10 it.

11 Q Was there someone at Shell who conducted  
12 negotiations with regard to this payment?

13 A I have now told you everything that I  
14 know about that particular incident. I don't know  
15 who was involved or the details of the specific  
16 negotiations.

17 Q Do you know if Phil Watts was  
18 responsible for negotiating the cash payment?

19 A I have no idea.

20 Q Do you know who Phil Watts is?

21 A Yes.

22 Q Who is Phil Watts?

23 A Well, he was employed by the Shell Group  
24 until 2004. He was the Chairman of the Committee  
25 of Managing Directors at the time that the

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 recategorization issue came to light. I knew -- I  
3 am aware that he was Walter's -- Walter van der  
4 Vijver's predecessor as the CEO of Exploration and  
5 Production, and I know he had a long and  
6 illustrious career prior to that, but I'm not  
7 aware of the details of it.

8 Q Now, going back again to your time in  
9 Denmark, how long did you stay in that position?

10 A Three years, just over three years.

11 Q So that takes us to 2001, 2002?

12 A Until May 2002. I guess it's  
13 actually -- it's probably the thick end of four  
14 years, actually. I think I started in September  
15 of 1998 and finished in May 2002.

16 Q And in May 2002 you became the Group  
17 Reserves Coordinator?

18 A Correct.

19 Q And how long did you stay in that  
20 position?

21 A Until June 2004.

22 Q Are you still employed by Shell?

23 A Yes.

24 Q So after, uh, after your tenure as the  
25 Group Reserves Coordinator in June 2004, where did  
0097

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 you go next?

3 A I was allowed to take a couple of months  
4 off, since many people realized I had been through  
5 a fairly stressful period. With all the hard work  
6 that had to go into the recategorization, my  
7 marriage had also ended during that process.  
8 Excuse me.

9 MR. TUTTLE: Let's take a break.

10 THE VIDEOGRAPHER: We are going off the  
11 record. The time is 12:29 p.m.

12 (Whereupon, the lunch recess was taken.)

13 THE VIDEOGRAPHER: We are back on the  
14 record. The time is 1:23 p.m.

15 BY MR. HABER:

16 Q Mr. Pay, good afternoon. When we broke  
17 we were just concluding your CV, and I think what  
18 I was looking for is the position that you took  
19 after your position -- your tenure as the Reserves  
20 Coordinator.

21 A Yes. I was offered a job in the E&P,  
22 Exploration and Production Technical Solutions  
23 Department, which is, again I referred earlier,  
24 been my career to having worked in a Technical  
25 Consultancy Department in The Hague. To a large  
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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 extent this is the same thing, but years later, so  
3 I'm -- for the first year or so I was just  
4 involved in several different projects, looking  
5 from a technical side at various new, new  
6 development, opportunities that the group was

7 potentially interested in investing in, mostly in  
8 Algeria. And then since November 2005 I've been  
9 involved with a project which aims to  
10 commercialize some gas reserves, gas production in  
11 Nigeria.

12 Q So you were in EP Technical Solutions  
13 Department from sometime in the fall of 2004  
14 through November 2005?

15 A Yeah.

16 Q Okay, and do you have a title in the  
17 position you are currently in?

18 A It's Business Opportunity Manager for  
19 the Olokala, O-L-O-K-A-L-A, LNG, new abbreviation,  
20 LNG project. It's a bit of a mouthful.

21 Q What does "LNG" stand for?

22 A Liquefied Natural Gas, so this is a  
23 solution that is applied to delivering gas which  
24 is not close to its market, such as Nigeria, where  
25 the markets were intending are the U.S. and  
0099

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 perhaps Europe, a substantial distance, too long  
3 to lay a pipeline economically, so the favored  
4 solution is to liquefy it by freezing it  
5 essentially until it becomes liquid, pour it onto  
6 ships and sail it across the ocean, and then allow  
7 it to heat up and expand and become gas again, and  
8 go into your pipeline distribution system here.

9 Q Now, the position that you are currently  
10 in; is that a position that is part of an  
11 operating unit?

12 A Formally the position that I am in is in  
13 the regional governance unit covering Africa, so  
14 it's the African Regional Office. However, much  
15 of the work that I'm doing is effectively on  
16 behalf of Shell Petroleum Development Company,  
17 SPDC, one of the Nigerian operation companies that  
18 we have.

19 Q Now, is this gas coming from any  
20 particular field, such as Bonga?

21 A It is possible that gas from Bonga might  
22 find its way into the liquefaction process that  
23 we're talking about, but that's an issue that is



24 still uncertain as to whether that will be the  
25 case. At the moment the Bonga gas, Shell has no  
0100

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 title to that gas. It's owned by the -- or title  
3 to it is held by the National Oil Company in  
4 Nigeria, and at present that gas is transported to  
5 the existing LNG facility at Bonny, B-O-N-N-Y.

6 Q And that's Bonny island?

7 A Yes.

8 Q And that's where they have facilities  
9 for the conversion of the gas into liquified gas  
10 takes place?

11 A We have an existing facility there, or  
12 we have a part interest in an existing facility  
13 there, along with some partners. The project I'm  
14 involved with is aiming to establish a separate  
15 site with a new set of infrastructure to liquify  
16 the gas.

17 Q Now, the gas that you're talking about,  
18 was this gas also the gas that was part of the  
19 restatement?

20 A No.

21 Q So this is separate and apart?

22 A Entirely different.

23 Q If I could just take you back to your  
24 time in Denmark, I believe you testified that you  
25 were there from sometime in 1998 until May of  
0101

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 2002.

3 A Correct. I think it was September 1998.

4 Q Thank you.

5 During your tenure in Denmark, do you  
6 recall there being guideline changes in 1998?

7 A I don't recall the specific details of  
8 1998 guidelines; however, I do recall that  
9 guideline documents were issued each year. Each  
10 year there would be an update to the previous  
11 year's.

12 Q Do you recall if there was any impact on  
13 the reporting of reserves in Denmark from changes  
14 in the guidelines in 1998?



15 A Thank you. You prompted my memory.  
16 Indeed, the 1998 guidelines did include a revision  
17 to guidance to the effect that from mature fields  
18 it was deemed appropriate to book proved reserves  
19 that were close to the, or equal to the  
20 expectation estimate of recovery.

21 Q What is an "expectation estimate"?

22 A It's a term that we use internally in  
23 Shell. I think it does have common usage in  
24 statistical analysis. It refers to effectively  
25 the most likely outcome. Well, actually a

0102

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 statistician would disagree with that, but I would  
3 use that to explain to a layman what the intent of  
4 it is.

5 Q And that change, did you consider that  
6 to be a loosening of Shell's guidelines by  
7 comparison to prior years?

8 MR. TUTTLE: Objection to form.  
9 You can answer.

10 THE WITNESS: I didn't have an opinion  
11 one way or the other. The way it was expressed  
12 was that it was a move to correct what had been  
13 conservatism in Shell's reporting practices  
14 hitherto.

15 BY MR. HABER:

16 Q At the time did you believe that Shell's  
17 reporting practices were conservative?

18 A I have no information upon which to form  
19 an opinion other than what are already in the  
20 guidelines.

21 Q Do you recall what impact the change in  
22 the guidelines had with regard to reserves that  
23 your operating unit was reporting?

24 A I don't recall the precise details.  
25 There was an upward effect, so the amount of

0103

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 reserves we reported did increase as a result of  
3 implementing that guideline, yes.

4 Q Do you recall if the increase was  
5 material?

6 MR. TUTTLE: Objection to form; calls

7 for a legal conclusion.

8 THE WITNESS: I don't know what, what

9 you mean by the word "material."

10 BY MR. HABER:

11 Q Do you know if the increase was

12 substantial?

13 A Similarly, I don't know what connotation

14 you put on that. It was -- well, I can't remember

15 how much the volume was. I don't recall it being

16 one that was large in relation to the total size

17 of the reserves that we had already anyway on the

18 books.

19 Q So you have no recollection?

20 A I don't recall the exact number.

21 Q Do you recall the percentage change?

22 A No.

23 Q Now, you testified that you became the

24 Group Reserves Coordinator in May of 2002. What

25 were the circumstances that surrounded you coming

0104

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 into that position?

3 A During the course of doing my job in

4 Denmark, as I've already explained, a significant

5 part of the job was contributing to the business

6 planning effort of the group and Exploration and

7 Production in particular, and the reserves

8 reporting, all of which came under the same

9 central team in The Hague. So as part of doing my

10 job in Denmark, I had fairly regular -- three or

11 four times a year -- interaction with that group

12 in The Hague, and I had already -- during the

13 three years that I was in Denmark, I had come to

14 the conclusion or formed an opinion that that

15 would be a potential option for me for my next

16 job. That would be a place I would be quite

17 interested in working, an area of the business I

18 would be quite interested in working.

19 My predecessor in the reserves job, not

20 my immediate predecessor, but one of my

21 predecessors in the reserves job, Remco Aalbers,

22 was doing the reserves coordinating job at that

23 time, and I had some interaction with him as part  
24 of the reserves reporting process, and  
25 specifically within that group, that was a job  
0105

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 that I had identified as one that I felt I would  
3 be suited to do and interested in doing as well.

4 I think in early 2001 the message was  
5 delivered to all the people involved with the  
6 reserves exercise around the world. As I think  
7 I've said before, each company had its own focal  
8 points for these matters. Everybody received a  
9 message that Remco had left that job, and a man by  
10 the name of Leigh Yaxley had taken over, and I was  
11 a little bit disappointed by that, because had I  
12 known that the job was coming up, I would have  
13 been a little bit more proactive in putting my  
14 name forward for it.

15 So I kind of forgot about it for the  
16 next six months, and then I think towards the end  
17 of 2001 or maybe in the middle of the summer  
18 sometime, in the second half of 2001, we got  
19 another message saying that Mr. Yaxley had chosen  
20 to work elsewhere, and so the position of Reserves  
21 Coordinator was now vacant again. And the message  
22 was from Jaap Nauta, essentially asking for  
23 volunteers, because it was approaching the  
24 end-of-the-year reporting exercise where they  
25 needed somebody in the Center to coordinate the  
0106

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2 exercise, and so rather urgently, rather than  
3 going through the normal process of looking for a  
4 candidate, there was a need to get somebody on  
5 seat as quickly as possible, and I said that I  
6 would be interested.

7 There was a -- the problem that we had  
8 at the time -- excuse me -- I think I mentioned  
9 that in Denmark there were effectively only two of  
10 us on the technical side, myself and my  
11 supervisor, Jan-Willem Roosch, and he was due to  
12 retire at the end of that year, so there was a  
13 problem presented whereby, if I left to do the job

14 in The Hague and he then retired, there would be a  
15 continuity problem, which eventually was resolved  
16 by the agreement that Jan-Willem would retire, as  
17 had been the plan, but then immediately come back  
18 on a short-term service contract and do the job of  
19 the end-year reserves reporting in The Hague  
20 whilst I would stay behind in Denmark, see his  
21 successor into his role, and then, in March or  
22 April or May -- May, as it turned out -- leave  
23 Denmark and take over from Jan-Willem in the Hague  
24 job, so that's how I came to be in that role.

25 Q Now, mr. Roosch served as an Interim

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2 Group Reserves Coordinator; is that correct?

3 A Yes.

4 Q And do you recall how long that was?

5 A I can't remember precisely when it  
6 started. I would imagine it would be obviously  
7 before the end of the year through until the time  
8 that I took over in May.

9 Q So to the best of your recollection,  
10 Mr. Roosch was involved in the ARPR process, the  
11 year-end reserves reporting process?

12 A Yes.

13 Q When, when you got the position, did you  
14 have any communications with Jaap Nauta concerning  
15 his expectations for, for you in that role?

16 MR. TUTTLE: You say when you got that  
17 position. Do you mean --

18 MR. HABER: GRC.

19 MR. TUTTLE: Do you mean in the fall or  
20 when he arrived to take the job?

21 MR. HABER: That's fair. Let's start in  
22 the fall.

23 BY MR. HABER:

24 Q Do you recall having any discussions  
25 with him regarding his expectations of you in the

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 role?

3 A No, I don't remember asking or receiving  
4 information that would fit in terms of his

5 expectations of me, no.

6 Q Subsequent to when you started in May,  
7 do you recall any discussions with Mr. Nauta in  
8 that regard?

9 A We discussed -- prior to and after my  
10 taking over from Jan-Willem, we discussed what the  
11 job entailed, the job description, what the  
12 various elements to it were, yes.

13 Q What do you recall of that discussion?

14 A Well, what I recall is essentially the  
15 description of the job and the various tasks that  
16 the Group Reserves Coordinator was responsible for  
17 executing.

18 Q Let's take the description of the job.  
19 What is the Group Reserves Coordinator?

20 A Okay. I don't have a photographic  
21 memory, so I can't give you the whole list from  
22 top to bottom, but if I were to explain to you in  
23 my own words, which is what I will now proceed to  
24 do, the job did consist of two distinctly  
25 different roles.

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2 One was the preparation and  
3 dissemination of the reserves guidelines to the  
4 group, with the objective of ensuring that the  
5 end-of-year reserves reports from the various  
6 group operating companies would be in compliance  
7 with the understanding of the SEC regulations. So  
8 a responsibility for examining those guidelines,  
9 updating them where necessary, where it had become  
10 apparent that changes would be necessary,  
11 disseminating them, and controlling the whole  
12 process of collecting data at the end of the year,  
13 data collection exercise that went on from roughly  
14 November through 'til January each year.

15 So that was one side of it. The other  
16 side of it was working in the business planning  
17 team, since this was part of the business planning  
18 function, was collecting, as part of the business  
19 planning process -- I think I've already mentioned  
20 that each operating company would submit  
21 information on all of the projects and

22 opportunities that they had in their portfolio.  
23 There would be pro forma submissions for each  
24 project, detailing capital expenditure, operating  
25 expenditure, production profiles, et cetera, et  
0110

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2 cetera, including rate at which the operating  
3 units projected or estimated that proved reserves  
4 would be added to the corporate balance as a  
5 function of time in the future.

6 So the second part of my job, if you  
7 like, was to maintain some oversight of that data  
8 as it was coming in, analyze it, compile for  
9 information of management views as to how our  
10 reserves maturation performance would look in the  
11 future according to different limitations of the  
12 business plan.

13 Q Now, did you report to different people  
14 depending upon the two functions that you just  
15 described, one being the guidelines and the  
16 closeout, the annual closeout, and the other being  
17 the business planning?

18 A No.

19 Q So you reported to I believe you said  
20 initially Jaap Nauta, and then above him, Malcolm  
21 Harper?

22 A And then Lorin Brass.

23 Q Did any of that reporting line change  
24 during your tenure as Group Reserves Coordinator?

25 A Jaap Nauta was replaced by Hans Bakker,  
0111

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2 B-A-K-K-E-R. As I recall, Malcolm Harper's job  
3 was I think dispensed with after a period of time,  
4 so I think in effect the reporting line at the end  
5 of the job was effectively from me to Hans Bakker,  
6 then to Lorin Brass.

7 Q Do you recall why Mr. Harper's position  
8 had been dispensed with?

9 A Not in particular, no.

10 Q Do you know if it had to do with the  
11 reorganization of EP?

12 A Well, I do recall it was in relation to



13 a readjustment of particular tasks and  
14 responsibilities such that Malcolm's job was  
15 effectively combined with somebody else's or  
16 something like that. I can't remember precisely.  
17 John Bell was the -- I think took over for Lorin  
18 Brass at a certain state.

19 Q Now, just a few moments ago you were  
20 referring to two separate types of functions of  
21 the position. With regard to the business  
22 planning, you referred to a business planning  
23 team.

24 A Yes.

25 Q Did you have a team with regard to

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 your -- the other function that you described?

3 MR. TUTTLE: Objection to form, the  
4 characterization.

5 BY MR. HABER:

6 Q You can answer.

7 A Yeah, well, I had one assistant but  
8 essentially was -- I was kind of a one-man band.

9 Q So with regard to the guidelines and the  
10 reserves reporting and the ARPR closeout function,  
11 you just had one assistant; is that correct?

12 A That's correct, in terms of the way the  
13 job was executed in The Hague. Of course, I had  
14 access to a wide network of people working and  
15 practicing the estimation of reserves around the  
16 group, but I didn't have anyone working directly  
17 with me as in sat in the same office space in The  
18 Hague.

19 Q And with regard to the business  
20 planning, you said you were part of the team. Can  
21 you describe that for me.

22 A Well, that was a team of people who,  
23 probably eight to ten in number, who would collect  
24 all this forward-planning data, and each would  
25 have a specialization in different areas of

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2 business performance, whether it's financial  
3 planning or capital management or production



4 performance. So each would specialize on a  
5 certain aspect of the plan, just as I specialized  
6 on the reserves aspect of it. It wasn't just  
7 reserves either. It was the whole maturation of  
8 hydrocarbons through the categorization system  
9 that I referred to before.

10 Q Now, did you have anyone assisting you  
11 with regard to business planning?

12 A It was the same assistant that I had,  
13 yeah.

14 Q Did you feel that your position was  
15 sufficiently staffed by Shell?

16 A At the time I felt busy. Anyway, I  
17 started the job. Given that Remco had, my  
18 predecessor, had, as far as I could determine,  
19 executed the job quite well on his own, I felt  
20 busy, I felt I could have used extra people, but I  
21 didn't think it was an essential requirement at  
22 the time, when I started the job.

23 Q Did that view subsequently change during  
24 your tenure?

25 A Yes. I think by the time the --

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 certainly by the time the 2004 announcement was  
3 made in January 2004, I had come to the conclusion  
4 that there was insufficient resourcing in the  
5 position.

6 Q Prior to January 2004 had you ever  
7 communicated that conclusion to any of your  
8 bosses?

9 A Yes. We indicated certainly I think in  
10 the second half of 2003 that opinion.

11 Q Do you recall how that communication was  
12 received by your bosses?

13 A I don't recall any specific feedback.  
14 It was in connection with efforts we were  
15 undergoing at the time to respond to and change  
16 our procedures, so we were introducing at the time  
17 a requirement traditional staff.

18 So just clarifying my earlier answer,  
19 one of the things we identified as being a  
20 positive move to increase the amount of staff time

21 available to the exercise was to appoint regional  
22 reserves and resource managers to each of the five  
23 regions, thereby increasing effectively the team  
24 from a size of one to the size of six, and that  
25 proposal was, was supported. So yeah, to that  
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2 extent there was positive feedback from  
3 management.

4 Q And when you say it was "supported,"  
5 does that mean it was also implemented?

6 A We were in process of implementing it,  
7 yes.

8 Q Did you ever talk about the sufficiency  
9 of resourcing with Remco Aalbers?

10 A I don't recall any specific  
11 conversations with Remco on that topic.

12 Q How about Mr. Roosch?

13 A I don't recall.

14 Q When you had taken over the position as  
15 Group Reserves Coordinator, you were replacing  
16 Mr. Roosch, correct?

17 A Yes.

18 Q Other than your time together in  
19 Denmark, had you worked with Mr. Roosch?

20 A No.

21 Q Did you form an opinion of Mr. Roosch's  
22 knowledge of SEC reporting requirements?

23 A When?

24 Q Through your relationship, working  
25 relationship with him.

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2 MR. TUTTLE: At any time?

3 BY MR. HABER:

4 Q At any time during that, right, that  
5 relationship.

6 A If I answer your question as it's --  
7 very specifically as it's asked, no, I didn't form  
8 an opinion as to his knowledge or efficiency as to  
9 the SEC rules per se.

10 Q I take it you would broaden it to  
11 include his knowledge as a reservoir engineer?

12 A Yes, his opinions as a reservoir  
13 engineer as to what constituted reasonable  
14 practices for reserves estimation, I felt were --  
15 he was qualified to offer opinions on those  
16 matters. That was quite evident.

17 Q During your time in Denmark where the  
18 issues surrounding what was considered reasonable  
19 practices for reserves estimation had arisen, do  
20 you recall any disagreements with Mr. Roosch?

21 MR. TUTTLE: Object to the form and  
22 foundation.

23 You can answer.

24 THE WITNESS: Do you mean were there  
25 any -- well, no, I don't remember any substantial

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2 issues that I disagreed with Mr. Roosch on.

3 BY MR. HABER:

4 Q That's effectively what I was looking  
5 for. You've responded.

6 A Yeah.

7 Q Now, did you know Leigh Yaxley?

8 A I knew of him. He had a reputation as a  
9 very competent reservoir engineer from a long time  
10 back in my career when I was working in The Hague.  
11 I didn't know him personally, but I knew him by  
12 reputation. I've met him a couple of times,  
13 perhaps, but I wouldn't say that constituted  
14 knowing him.

15 Q What about Mr. Aalbers; did you know  
16 Mr. Aalbers?

17 A Mr. Aalbers I would say I didn't know.  
18 I was acquainted with. We had been on -- some of  
19 these training courses that I mentioned we had  
20 been together on, so I knew his name, he knew  
21 mine. We would stop and talk if we met in any  
22 particular case, but we never worked together.

23 Q Did you form an opinion of Mr. Aalbers  
24 as the Group Reserves Coordinator; that is, did  
25 you think that he did a satisfactory job, he was

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2 diligent with regard to the implementation and the

3 compliance issues surrounding the guidelines,  
4 those sort of issues?

5 MR. TUTTLE: Object to the form and  
6 compound question.

7 Just pick one of them to answer.

8 MR. HABER: I'm just looking for the  
9 general, but okay.

10 MR. TUTTLE: I just want to make sure  
11 the record is clear on what he's answering.

12 MR. HABER: That's fine. That's fine.

13 BY MR. HABER:

14 Q Did you form an opinion of Mr. Aalbers  
15 as the Group Reserves Coordinator with regard to  
16 issues surrounding compliance with Shell's  
17 guidelines?

18 A I had no reason to suspect that in  
19 general the guidelines that he was advocating that  
20 we use within the group were not in compliance.  
21 Does that answer your question?

22 Q Yeah. Did you, in looking back, form an  
23 opinion of whether Mr. Aalbers was aggressive with  
24 regard to the booking of reserves?

25 A There was one instance in which I was  
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2 challenged -- probably a good word for it -- by  
3 Mr. Aalbers on a particular year-end report that I  
4 had submitted on behalf of Denmark in which I had  
5 excluded reserves for one particular project, and  
6 he had challenged me on this, which I would say  
7 was a legitimate part of his role and the role of  
8 the Group Reserves Coordinator, to try to ensure  
9 that all reserves that can legitimately be booked  
10 are booked. He challenged me on why I had  
11 excluded this particular project.

12 Q And what project are you referring to?

13 A It was in relation to the development of  
14 a field called Halfdan -- H-A-L-F-D-A-N, all one  
15 word -- where a first phase of development had  
16 already been undertaken. A second phase was in  
17 planning but had not yet been fully defined. I  
18 understood that Mr. Aalbers was aware of that  
19 second phase of the project, because it was

20 something we had submitted data on as part of the  
21 business planning process. I excluded it, because  
22 I didn't have a full documented Field Development  
23 Plan describing that plan, and Mr. Aalbers  
24 suggested to me that that would not be necessary.  
25 As long as there was a brief description of the  
0120

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2 plan available, that would suffice.

3 Q So did you interpret that to mean that  
4 Mr. Aalbers was advocating the booking of reserves  
5 for that part of the project?

6 A Yes, and it came -- I think the  
7 disagreement could be characterized as one of  
8 interpretation over exactly what level of  
9 documentation would be required in order to  
10 substantiate a reserves booking. It was certainly  
11 not in doubt in my mind that the reserves would be  
12 bookable at some stage. There was no doubt in my  
13 mind that that project would go ahead and would  
14 yield the production of those reserves. The  
15 question was whether I had sufficient documentary  
16 definition of that particular project.

17 Q And did you, did you believe that  
18 Mr. Aalbers was under pressure to book reserves?

19 MR. TUTTLE: Object to the form;  
20 speculation.

21 BY MR. HABER:

22 Q You can answer.

23 A I have no reason to know -- I don't know  
24 what you mean by the word "under pressure." That  
25 can mean many things.

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2 Q Well, what does it mean to you?

3 A To me, if you use that word in the way  
4 it's been raised in previous such interviews that  
5 I've had, I mean I would consistently say to you  
6 that we're all under pressure as part of the work  
7 that we do and the jobs that we have. You're  
8 under pressure today to have a satisfactory  
9 interview with me, satisfactory for your client.

10 So anytime you're involved in a business

11 enterprise and there are objectives, legitimate  
12 objectives of that business enterprise, whether  
13 it's to make money or produce widgets or whatever  
14 it is, the individuals working within that  
15 enterprise will always feel a degree of pressure  
16 to meet the objectives that have been set.

17 Now, one of the objectives that  
18 certainly everybody in the company I think was  
19 aware of was the need to or the target to replace  
20 our production with new reserves additions every  
21 year. And as part of the role of the Group  
22 Reserves Coordinator, obviously you're quite  
23 closely involved with compiling the data that will  
24 indicate whether or not that target has been met.  
25 So to that extent, one feels some pressure to, to

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2 try to -- strive to ensure that the target is met  
3 if it can be met.

4 Q Now, did you have an understanding at  
5 that time that Mr. Aalbers was feeling pressure to  
6 meet the target that had been, had been made with  
7 regard to reserves additions in your operating  
8 unit?

9 MR. TUTTLE: Objection to the extent it  
10 calls for speculation.

11 You can answer.

12 THE WITNESS: There was nothing in  
13 Mr. Aalbers' behavior that was inconsistent with  
14 the level of pressure that would be consistent  
15 with the way I just described his role and  
16 subsequently my role.

17 BY MR. HABER:

18 Q Was -- you mentioned targets. I  
19 understand that there was a scorecard system in  
20 Shell. Are you referring now to targets that,  
21 targets that are set within scorecards, or is it  
22 something else?

23 A Well, at that time reserves replacement  
24 was a scorecard target, but I didn't need -- none  
25 of us working in reservoir engineering or the

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2 production operation of Shell needed to be told.  
3 It was a matter of common knowledge and common  
4 sense that if the company was not replacing its  
5 reserves or rather not replacing its production  
6 with new reserves each year, it was -- it's a  
7 matter of fact that that is a situation that is  
8 not sustainable for a long period of time. If you  
9 produce two and only add one, eventually you're  
10 going to run out. So for a business to sustain  
11 itself, you must at least replace production. If  
12 you want your business to grow, you must more than  
13 replace production.

14 So that was common knowledge, and to the  
15 extent that -- I think you could say everybody  
16 working in my area of the business would have  
17 understood that replacing reserves was an  
18 important level of performance for the business to  
19 achieve and to that extent could be classified as  
20 a "target."

21 Q Did Mr. Aalbers ever say anything in  
22 words or substance to the effect that senior  
23 management was very interested in booking reserves  
24 to help the group's reserves replacement ratio?

25 A He -- I don't recall him saying anything  
0124

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2 specifically.

3 Q At or about this time, do you recall any  
4 discussion within Shell about senior management's  
5 interest in increasing Shell's reserves  
6 replacement ratio?

7 A So just to clarify that when you say "at  
8 this time" or "at or about this time," you're  
9 referring to the end of 2000?

10 Q When this --

11 A -- this booking was made?

12 Q Correct.

13 A I wasn't party to any senior management  
14 discussion of that nature then.

15 Q Subsequent to that time when you were in  
16 the role of Group Reserves Coordinator, the same  
17 question: Do you recall senior management  
18 expressing strong interest in increasing Shell's



19 reserves replacement ratio?

20 A Yes, in the context of achieving a level  
21 of business performance, it would be consistent  
22 with sustaining the future or growing the future  
23 in the manner that I described a few minutes ago.  
24 So to that extent, senior management understood  
25 the importance of replacing reserves and expressed  
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2 interest in many different ways, verbal or written  
3 or what have you, in achieving a reserves  
4 replacement performance that was acceptable.

5 Q Do you feel during your tenure as Group  
6 Reserves Coordinator, that pressure was exerted  
7 upon you to allow reserves to be booked where you  
8 thought that they were questionable?

9 A No.

10 Q Do you know, during your tenure as Group  
11 Reserves Coordinator, if senior management had  
12 made external representations about the group's  
13 reserves replacement ratio?

14 MR. TUTTLE: Objection to form.

15 You can answer.

16 THE WITNESS: It depends what you mean  
17 by "external representations," of course.  
18 Statements about reserves replacement are made as  
19 part of presenting the annual accounts each year,  
20 and I was aware and contributed information to  
21 presentation materials that would be used to  
22 inform investors, shareholders, business analysts;  
23 essentially each time the Annual Reports were  
24 submitted, there would be a presentation by senior  
25 managers to the business community, shareholders,  
0126

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2 et cetera, so I was aware of that external  
3 representation. Beyond that, I'm not clear what  
4 you might have in mind.

5 BY MR. HABER:

6 Q No, that was what I had in mind.

7 A Okay.

8 Q Communications to analysts,  
9 shareholders, the market in general.

10 Were you, were you involved in compiling

11 data for the communications that were made to  
12 analysts and shareholders and the market?

13 A Yes. I would provide information on --  
14 essentially summaries of the information that was  
15 contained in the Annual Report.

16 Q And the information that was contained  
17 in the Annual Report, is that information that was  
18 obtained through the ARPR process?

19 A Yes.

20 Q Do you know if the numbers ever deviated  
21 between the information that was submitted in the  
22 ARPR process and then ultimately was publicly  
23 reported in the Annual Report?

24 A I certainly am not aware of any such  
25 incident.

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2 Q I think it might be helpful at this  
3 point if you can describe briefly what the ARPR  
4 process is, how it actually works from its  
5 inception to the conclusion of the process.

6 A Okay. Each operating unit, operating  
7 company in the group is required to maintain data  
8 on the hydrocarbon resource volumes that it has  
9 available within its portfolio and to categorize  
10 those volumes as I previously explained. So some  
11 of them will be ranges from the least mature -- if  
12 I can use the word "mature" to describe how firm  
13 the volume can be defined, the least mature would  
14 be an exploration prospect where one might suspect  
15 that oil is or gas is present in a certain place  
16 in the ground, but we haven't drilled any wells to  
17 find out whether that is the case. That's an  
18 undiscovered volume.

19 As you drill the wells to discover, as  
20 you drill more wells to define the prospect, as  
21 you make your development plans and as you execute  
22 those plans and bring those assets into  
23 production, so the volumes will track through  
24 different categories in the system, the categories  
25 enabling us to see how mature different elements

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2 of the resource portfolio that we have is.

3 So the ARPR exercise, it's -- "ARPR"

4 stands for Annual Report of Petroleum Resources,

5 so it's not -- part of that is proved reserves,

6 but it's actually covering the whole resource

7 base. It's essentially a data-gathering exercise

8 where we are required, each of the operating

9 companies, to, from their own records, compile a

10 summary of the resource volumes present in each of

11 the categories, and to provide some detail in

12 terms of the fields in which those volumes were

13 contained.

14 And where volumes had changed from one

15 year to the next, if they grow, been revised

16 upwards or downwards, we would need information on

17 the reasons for the revisions. If they changed

18 from one category to another, we would require an

19 explanation of the reason for the change. So

20 essentially an annual exercise in which we would

21 compare the end-of-year resource categorization

22 with the start-of-year resource categorization and

23 understand the changes that had occurred in the

24 meantime.

25 And that occurred through -- it was --

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2 the data-gathering process -- seems a little

3 arcane now, but it was done on spreadsheets,

4 primarily because everybody everywhere has access

5 to spreadsheets. Not necessarily everybody

6 everywhere has access to fancy database systems,

7 so the spreadsheet approach was the way we took,

8 so we would sent out a blank template to everybody

9 with all the required fields in there, data fields

10 that we would ask to be filled in, and the

11 companies would compile their estimates, sign off,

12 and submit those estimates to us, using the Excel

13 workbook.

14 Q And when did you send out these blank

15 spreadsheets?

16 A Typically October/November each year.

17 Q And how long did the operating units

18 have to fill in the information and send it back  
19 to the Center?

20 A From then -- from the time they were  
21 received until early January.

22 Q And what was the role of the Group  
23 Reserves Coordinator in the ARPR process?

24 A Well, it started with making whatever  
25 adjustments would be required to the workbook to  
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2 improve the level of resolution or properties that  
3 we would seek information on. So we would revise  
4 the workbook, if necessary, each year, but it was  
5 kind of a standard format, so it didn't change  
6 much from one year to the next, so it was one I  
7 was very familiar with from my time previously in  
8 Denmark. So we would update it, send it out.

9 At the same time or preferably earlier,  
10 although I only issued one set of resource  
11 guidelines myself in 2003, typically the resource  
12 guideline revision would come out at about the  
13 same time. The one for 2002 had been issued  
14 earlier, I think, in April, but normally it would  
15 be in the second half of the year that the  
16 guidelines would come out, so we'd invite the  
17 focal points and their colleagues within the  
18 operating units to review the guidelines and  
19 compile the data as part of the normal annual  
20 process.

21 Q And when did the work of the Group  
22 Reserves Coordinator conclude within the process?

23 A So yes, thank you. I didn't finish  
24 answering your previous question. So that was the  
25 start of the exercise, and then obviously those  
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2 returns would come in, and the Group Reserves  
3 Coordinator would compile those estimates, do some  
4 consistency checks, make sure that he or I  
5 understood and could represent, on behalf of the  
6 operating companies, the aggregated results to  
7 management, prepare reports to management on  
8 the -- what the data was telling us as it came in,

9 what the results were in terms of reserves  
10 replacement, new discoveries, all sorts of  
11 different parameters.

12 So there would be inputs to the -- that  
13 data would then be taken -- after being signed off  
14 internally and with the external auditors, that  
15 data would be fed into the Annual Reports, the  
16 Form 20F submission, which typically I think we  
17 aimed -- I only really saw one exercise before the  
18 recategorization, but I think the target was to  
19 finish that by March or April time, and generally  
20 I think by May that exercise would be concluded.

21 Q Now, in your answer you mentioned that  
22 the Group Reserves Coordinator would make  
23 adjustments where needed. What type of  
24 adjustments are you referring to?

25 A Well, I think in -- to be entirely

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 precise with your question, I was mentioning  
3 adjustments in relation to the way in which the  
4 data was gathered --

5 Q Okay.

6 A -- not adjustments --

7 THE REPORTER: Can you say that again?  
8 I'm sorry.

9 THE WITNESS: Well, the question was  
10 that, I think frankly is a bit of a  
11 misrepresentation of what I said, actually.

12 BY MR. HABER:

13 Q Not intending to do so either.

14 A Okay. I didn't make any adjustments to  
15 the data that was submitted. The adjustments I  
16 mentioned were adjustments to the way in which the  
17 data was gathered, so if, for example, I wanted to  
18 have information on -- one of the adjustments I  
19 made eventually was to ask specifically for  
20 information on how much gas was consumed as fuel  
21 and flare by the operating units. Previously we  
22 didn't gather that information, so I adjusted the  
23 data gathering system to include places where that  
24 sort of information could be provided.

25 Q Do you recall during your -- during the

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2 one time that you were involved in the process,  
3 going underneath the data that was given to you,  
4 submitted to you by an operating unit, to check if  
5 the information that was being supplied to you was  
6 compliant with Shell's guidelines?

7 MR. TUTTLE: Object to the form.

8 You can answer.

9 THE WITNESS: Well, certainly during  
10 2003, either directly or indirectly -- meaning  
11 either personally myself or with the assistance of  
12 other groups of people who were looking at the  
13 reserves reporting of different operating  
14 companies -- yes, I had an interest in  
15 understanding that the reserves were compliant  
16 with our guidelines, so certainly in 2003, yes, I  
17 was involved in work to verify that the reserves  
18 were compliant with our guidelines.

19 BY MR. HABER:

20 Q Do you recall any instances where the  
21 reserves data that was being submitted was not  
22 compliant with Shell's guidelines?

23 A Well, yes. That's the reason we're  
24 sitting here today. You mean prior to the end of  
25 2003?

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2 Q Prior to the end of 2003, yes.

3 A Well, there are a number of areas where  
4 I was interested to find out more about the basis  
5 for the reserves figures that had been submitted.  
6 I mean one example that comes to mind is the  
7 figures that were submitted by our operating units  
8 in Oman at the end of 2002, whereupon reviewing  
9 the data that had been submitted by Oman, I became  
10 suspicious that the -- there was not a direct link  
11 between individual fields and the estimates for  
12 the individual fields that they were operating in  
13 Oman. There wasn't a clear auditable link between  
14 those estimates and the corporate total that had  
15 been submitted.

16 So I engaged in some discussion with my



17 contacts in Oman to find out for myself more about  
18 the process that they had been through in order to  
19 estimate those figures, as a result of which it  
20 did -- I came to the conclusion that the process  
21 they had followed was not in compliance with our  
22 own guidelines. I didn't at that time know  
23 whether that meant that the figures were  
24 themselves erroneous, but since it was evident  
25 they hadn't followed the process that was

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 advocated, there was a possibility that it might  
3 be, that there might be a problem with the  
4 numbers.

5 Now, this is very late in the  
6 compilation of the year-end data, and in view of  
7 the time deadlines that we were up against in  
8 early January to produce the final figures, I  
9 didn't have time then really to investigate  
10 further, but what we did do was agree a, a revised  
11 set of numbers that was designed such that if  
12 there was a problem with the process that had been  
13 followed, if that would have led to an  
14 overstatement of reserves, then we should not in  
15 this reporting exercise make that overstatement  
16 larger.

17 So essentially we agreed not to, not to  
18 change the figures, not to increase the figures  
19 for Oman. And we undertook that later in the  
20 year, when we had the benefit of more time, we  
21 would investigate the matter in more detail, and I  
22 would make a visit to Oman to find out more about  
23 the process they followed for themselves, which I  
24 did, and try to help the people in Oman redefine  
25 what practices would be compliant.

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2 Q So in connection with the closeout in  
3 the ARPR, the figures for Oman were submitted with  
4 all the other operating unit information that  
5 ultimately went into the Annual Report; is that  
6 correct?

7 A Yes, after we agreed to revise their



8 submission.

9 Q Now, how did you revise their  
10 submission?

11 A Well, as I've indicated, we -- the  
12 submission they had made had indicated an increase  
13 in proved reserves. I felt it was appropriate not  
14 to register such an increase until we had verified  
15 that the reserves basis was itself justified.

16 Q Did you have any reason to believe that  
17 the number, independent of the increase, might  
18 have been overstated?

19 A As I think I've already said, I didn't  
20 know -- I couldn't tell with the information  
21 available to me whether or not that was the case.  
22 I was, however, concerned, as I think I said, that  
23 if there was an overstatement, we shouldn't do  
24 something now that would cause a worsening of that  
25 overstatement, but with the figures that I had

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 available to me, with the information I had  
3 available to me and with the time available, I  
4 couldn't, I couldn't have picked any other number  
5 that I would have been more certain about than the  
6 number that we had resulting from the previous  
7 year's exercise.

8 Q Okay. Other than Oman, is there another  
9 operating unit -- and we will come back to Oman in  
10 greater detail later this proceeding. Other than  
11 Oman, was there another operating unit, again  
12 measured against Shell's guidelines, caused some  
13 suspicions on your part, as Group Reserves  
14 Coordinator, during the ARPR process?

15 MR. TUTTLE: And is there a particular  
16 year?

17 MR. HABER: He only did one, 2003.

18 MR. TUTTLE: Well, I mean I think just  
19 to make sure he understands that it's not  
20 including the ARPR for 2003 that resulted from the  
21 Project Rockford.

22 MR. HABER: Right. We're only talking  
23 about the year-end 2002, which would be 2003,  
24 which is when he would have been in the role.

25 MR. TUTTLE: I just want to make sure

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2 that's clear so that he's --

3 MR. FERRARA: Sorry. I gather what  
4 you're talking about is what he knew or suspected  
5 at the time, not what he has inferred today given  
6 the results of Project Rockford.

7 MR. HABER: That's correct.

8 MR. FERRARA: So you're asking whether  
9 he had suspicions or knowledge at the time?

10 MR. HABER: Right, contemporaneous  
11 suspicions or knowledge, correct.

12 THE WITNESS: At the time in compiling  
13 the year-end 2002 report, the answer to your  
14 question I think is no. There were no -- there  
15 was nothing in the filings of individual operating  
16 units that raised a similar level of concern at  
17 that time.

18 BY MR. HABER:

19 Q Again so we're clear now, Oman was such  
20 a situation at that time?

21 A Yes.

22 Q Now, going back to the process, you've  
23 described effectively the role of the operating  
24 unit. You've described the role of the Group  
25 Reserves Coordinator. When the process had

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 concluded, did that information then get run up  
3 the flag pole, if you will, to the ExCom?

4 A Yes.

5 Q And how did that information go from  
6 your office to the ExCom?

7 A I wrote a brief report, explaining the,  
8 the previous year's performance in terms of proved  
9 reserves additions, proved reserves changes, and  
10 the reserves replacement ratio for the year, which  
11 is the parameter by which such things are  
12 measured, so I wrote a brief two-page report  
13 summarizing the changes, the reserves replacement  
14 ratio and the year-end balance.

15 Q Now, within these reports -- were these

16 in the form of Notes For Information, Notes For  
17 Discussion, Notes For Decision?

18 A I can't remember which of those three  
19 labels we put on the top.

20 Q And you understand that there is a  
21 difference between the three different notes I've  
22 just mentioned?

23 A I do.

24 Q And what are those differences?

25 A Well, I was just about to say it's not

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 always clear to me precisely what those  
3 differences are, but -- well, a Note For Decision  
4 is fairly obvious. It's the other two that  
5 sometimes we struggle to understand what the  
6 distinction might be, but in this case, of that  
7 stage in the process, which would be late January,  
8 there was effectively no, uh, no opportunity  
9 remaining to, uh, shall we say, decide upon the  
10 data. The data was what it was by that stage, so  
11 in effect the information was provided for  
12 information and for discussion if they, if they  
13 wanted to discuss it, but I wasn't aware that  
14 there was any decision able to be made at that  
15 stage of the process.

16 Q And in the note that you prepared  
17 summarizing the change in the reserves replacement  
18 ratio in the year-end balance, did you also  
19 include a discussion of operating units that gave  
20 you some concern?

21 MR. TUTTLE: Are you asking specifically  
22 about the note he prepared in January of 2003?

23 MR. HABER: That's correct.

24 MR. TUTTLE: Just be sure you've got in  
25 mind the specific note.

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2 MR. HABER: Okay.

3 THE WITNESS: I can't remember. If you  
4 have it available, we can take a look at it.

5 BY MR. HABER:

6 Q We'll probably get to that. Generally

7 speaking, though, do you recall preparing any  
8 notes that went to the ExCom wherein you had  
9 discussed particular operating units that had  
10 given you some cause for concern?

11 MR. TUTTLE: Again, is there a time  
12 frame?

13 MR. HABER: During his tenure as GRC.

14 MR. TUTTLE: Including Project Rockford?

15 MR. HABER: Excluding Project Rockford.

16 MR. TUTTLE: I just want to make sure.

17 THE WITNESS: I wrote several notes  
18 during the time that I was in that job, usually  
19 with the objective of informing and stimulating  
20 debate amongst ExCom about a prospective reserves  
21 replacement performance either in the current year  
22 or over the next five years planning period, and  
23 to try to make it clear the factors that were  
24 impeding perhaps the migration of reserves through  
25 this classification system, so we had a lot of  
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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 reserves in the unproved category, in response to  
3 questions which I would paraphrase as saying why  
4 are those volumes not moving through as quickly as  
5 perhaps we would like them to, analyzing the  
6 portfolio to try to determine what the reasons for  
7 that might be.

8 So it's largely in that vein that I was  
9 preparing information for ExCom, information and  
10 discussion, as part of which clearly there was  
11 some focus on the current proved reserves balance  
12 and performance that would be expected in the  
13 current reporting year or the year thereafter or  
14 the planning period, and I felt it appropriate  
15 that as part of that reporting, and actually I  
16 think under encouragement from some ExCom members,  
17 to include a list of reserves where there may be  
18 some questions pertaining or where -- you have to  
19 understand it was a fluid, it was kind of a fluid  
20 situation.

21 Our appreciation of what the SEC rules  
22 really required I think is a matter of record and  
23 we discussed it today, was open to interpretation.

24 There was opinions both within Shell and within  
25 the industry, frankly, as to what the requirements  
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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 were, and essentially I took the opinion that we  
3 had certain reserves on our balance which, if the  
4 reserves requirements would be clarified in a more  
5 stringent manner by the SEC, that these -- you  
6 know, there would be some reserves that would be  
7 more readily open to challenge than perhaps some  
8 of the others.

9 BY MR. HABER:

10 Q Now, is this list what I've seen in  
11 documentation called the "exposure list"?

12 A Potential exposure, yeah.

13 Q And this potential exposure, this list  
14 of operating -- withdrawn. Was this list a list  
15 of operating units or particular fields?

16 A As I recall, it included both from time  
17 to time.

18 Q Okay. So the potential exposures that  
19 were reflected on this list, if, as you said, it  
20 were to be determined that Shell's interpretation  
21 of the SEC's reporting requirements did not  
22 conform with the SEC's view, were these reserves  
23 that were on that list open to a de-booking or a  
24 restatement?

25 MR. TUTTLE: Objection to the  
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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 characterization.

3 You can answer.

4 THE WITNESS: Well, potentially. I mean  
5 that was the intention. I think in follow-up to  
6 the questions you were asking earlier, yes, I mean  
7 I would also put on that list -- for example,  
8 after the situation in Oman became apparent to me  
9 from the year-end report that we talked about in  
10 2002, I added Oman to that list, not because that  
11 was vulnerable to a tightening of the SEC  
12 guidance, as it were, but simply because it was a  
13 situation that needed investigating, which we  
14 proceeded to do in 2003 as a consequence of which

15 we de-booked the volumes there, so I guess it  
16 caught a combination of things.

17 BY MR. HABER:

18 Q Just so the record is clear, when you  
19 say "caught a combination of things," what are  
20 those things? I just want the record to be clear  
21 what you intended to include and what was included  
22 on that list.

23 A Well, areas where I think there was  
24 potentially a challenge that could be raised  
25 against the reserves that we had on the books,

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 where further follow-up work would be potentially  
3 required to confirm the booking, or where,  
4 according to the current guidelines that we had --  
5 just to take a step back, I'm sure we'll talk  
6 about Gorgon at some stage, but Gorgon had been  
7 booked at a time when we had different guidelines  
8 in place compared with the ones that we had as of  
9 that time. So that booking had been made in prior  
10 years and sanctioned by the managers who were  
11 present at the time that the booking was made, in  
12 1997, but continued retention of that reserves  
13 volume on the books had been carried through each  
14 Annual Reporting exercise between then and  
15 2002/2003, the period we're talking about, and had  
16 not been de-booked.

17 And yet we had guidelines, guidance, our  
18 own internal guidelines, and, since March 2001,  
19 guidance information from the SEC which indicated  
20 that for frontier areas, a certain level of -- a  
21 certain list of criteria were offered by the SEC  
22 as being evidence that a project would qualify or  
23 not for proved reserves. And against that list  
24 Gorgon in many respects didn't, didn't qualify and  
25 therefore could be seen as being potentially at

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 risk, but I don't think it was a clear-cut case.

3 Q Again we'll get into Gorgon and the  
4 discussions around Gorgon shortly.

5 MR. TUTTLE: Are you moving to a new



6 area, or --

7 MR. HABER: Well, I'm still following up  
8 on the whole ARPR process. We can probably take a  
9 break when we get to a different act within the  
10 process. We can take a break.

11 THE VIDEOGRAPHER: We are going off the  
12 record. The time is 2:29 p.m.

13 (Whereupon, a short recess was taken.)

14 THE VIDEOGRAPHER: We are back on the  
15 record. The time is 2:48 p.m.

16 BY MR. HABER:

17 Q Mr. Pay, we were talking about a number  
18 of issues, but the issue that started a lot of the  
19 last series of questions and answers was the ARPR  
20 process, so I want to take you back there again.

21 Was there a role for the Group Reserves  
22 Auditor in the ARPR process?

23 A In the process of compiling the end-year  
24 proved reserves estimates, yes.

25 Q And what was that role if you know?

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A Well, my hesitation is that I thought we  
3 had spent some time covering this material  
4 already.

5 Q Okay. If you can just briefly describe  
6 what the GRA role was in the ARPR process.

7 A To take an independent view of the  
8 submissions that had been provided by the  
9 operating units; to ensure that he understood or  
10 that there was adequate explanation for the  
11 changes that were registered there; to verify  
12 that, where there were known issues arising from  
13 the audit visits that he had made in that year or  
14 in prior years, that any recommendations he had  
15 made had been acted upon and the results of those  
16 recommendations were reflected in the numbers that  
17 were submitted; and, through a process of  
18 questioning, to satisfy himself that the group  
19 guidelines had been adhered to, generally, in the  
20 preparation of the data.

21 Q Did the external auditors have a role in  
22 the ARPR process?



23 A The external auditors I mean really  
24 witnessed this exercise once, but at the end of  
25 the 2002 data collection, as was apparently the  
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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 norm, representatives of the external auditors  
3 were given office accommodation in our office  
4 building and sat with us as the returns were  
5 coming in; would review the returns that were  
6 coming in, and compile -- essentially do checks  
7 that, first of all, the submissions from the OUs  
8 themselves were internally consistent, I would  
9 say, purely from a numerical point of view, that  
10 the numbers added up; and also in the way that we  
11 compiled those returns into a group statement and  
12 individual regional statements, that those  
13 compilations faithfully reflected the numbers that  
14 were in the individual company submissions,  
15 operating company submissions.

16 Q Is there a, a meeting at the conclusion  
17 of the process where the external auditors attend?

18 A Yes. I believe as part of the -- well,  
19 sorry. No, I know as part of the process, once  
20 the figures had been compiled, the Group Reserves  
21 Auditor submitted a report on the end-year figures  
22 to the external consultants -- auditors --  
23 sorry -- and a meeting was held at which the Group  
24 Reserves Auditor presented his findings on the  
25 end-year compilation figures.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q Now, in your earlier answer you  
3 mentioned that the external auditors would also,  
4 as part of their role, provide challenge to the  
5 information, the data that was coming in. Can you  
6 think of a particular instance where the external  
7 auditors did, in fact, provide challenge to the  
8 submissions?

9 MR. TUTTLE: Object to the  
10 characterization.

11 You can answer.

12 THE WITNESS: I'm not sure I recall  
13 saying that the external auditors did provide

14 challenge.

15 BY MR. HABER:

16 Q I apologize. I thought I did hear you  
17 say that.

18 Well, let me ask you in general: Do you  
19 recall any instances where the external auditors  
20 provided challenge to the submissions that were  
21 made by the operating units?

22 A Not really. My perception was that they  
23 relied heavily, almost exclusively, on the opinion  
24 of the Group Reserves Auditor.

25 Q What was your interaction with the

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 external auditors during the process?

3 A In terms of the process that took place,  
4 it was a daily interaction during which I would,  
5 or my assistant would provide the auditor's  
6 representatives with the latest information that  
7 we had available as the returns were coming in,  
8 and that those auditor representatives would take  
9 that information away, do some form of consistency  
10 checking, which I had the feeling was primarily  
11 numerical consistency checking, that the figures  
12 added up.

13 I don't recall there being any  
14 substantive challenge originating from those  
15 auditor representatives as to compliance issues.  
16 For example, the questions that I got back were  
17 "there seems to be some information missing" or  
18 "can you explain further the nature of this  
19 change." You know, maybe the explanation was not  
20 fully understood, so it was more questions for  
21 clarification, I would say.

22 Q Do you recall any discussions during the  
23 ARPR for year-end 2002 with the external auditors  
24 that involved operating units on the exposure list  
25 that you talked about?

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A I don't recall specifically what was on  
3 the exposure list at that time, nor do I recall  
4 any specific discussions with the auditors.

5 Q Let's take Gorgon, for example. Do you  
6 recall any discussions with the external auditors  
7 concerning Gorgon during the 2002 closeout?

8 A Actually, sitting here today, I don't  
9 recall any particular discussion that might have  
10 taken place.

11 Q Do you recall the, uh, any of the  
12 external auditors challenging the Gorgon booking;  
13 that is, keeping it on the books as opposed to  
14 de-booking it?

15 A I'm sorry. I can't remember if any such  
16 challenge was made.

17 Q Okay. Now, in this closeout meeting  
18 where the Group Reserves Auditor makes the  
19 presentation to the external auditors, who attends  
20 from the external auditors; is it both KPMG and  
21 PricewaterhouseCoopers or just one of them?

22 A I believe representatives of both were  
23 present.

24 Q Do you recall, for the meeting that you  
25 attended, who attended for KPMG?

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A No. I remember his face, but I can't  
3 bring his name to mind.

4 Q Do you recall who attended for  
5 PricewaterhouseCoopers?

6 A I believe Brian Puffer was present.

7 Q For KPMG was it Hans de Munnik?

8 A Can you say the name again.

9 MR. TUTTLE: De Munnik.

10 BY MR. HABER:

11 Q De Munnik. Thank you.

12 A Honestly, I can't remember if he was  
13 present at that meeting. I know I've met him, but  
14 I can't remember if it was at that meeting. I'm  
15 sorry. There probably is a record of that meeting  
16 that would show who was there.

17 Q How about a Hans van Delden?

18 A Yes. Again I can't remember  
19 specifically if he was at that meeting, but he was  
20 certainly somebody known to me.

21 Q I take it when you started in the

22 position as Group Reserves Coordinator, there was  
23 a transition period between you -- the handoff, if  
24 you will, handoff period between you and  
25 Mr. Roosch; is that correct?

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 MR. TUTTLE: Objection to form,  
3 foundation.

4 BY MR. HABER:

5 Q Was there a handoff period between you  
6 and Mr. Roosch?

7 A There was a period of approximately a  
8 week during which we worked together, and he -- I  
9 took over the job from him during that week.

10 Q During this week did you work closely  
11 with him, or were there scheduled meetings to  
12 discuss the position?

13 A Well, the week consisted of many  
14 different aspects. Part of it was scheduled  
15 meetings with regional business managers,  
16 introductory meetings; introductory meetings with  
17 various members of the team in The Hague office.  
18 So, as you would expect, when a new person comes  
19 into the job, there's a whole series of  
20 introductions to be gone through, so I would say  
21 that consumed most of the time that we spent in  
22 the week.

23 We spent some time, just the two of us,  
24 sitting together talking about things he wished to  
25 bring to my attention, one of which was the, a

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 piece of work that he had been asked to commence,  
3 and that was -- it was referred to as a "roadmap"  
4 to try to improve -- to examine what actions could  
5 be taken in an effort to improve reserves  
6 replacement for the year 2002. So that was  
7 essentially a list of opportunities that he had  
8 compiled in consultation with operating companies  
9 and regional representatives around the group.

10 As to actions that could be taken -- and  
11 here I'm talking about additional resourcing of  
12 studies, attempts to bring FIDs at an earlier

13 time, that would cause reserves to be bookable in  
14 2002 as opposed to in later years, so a roadmap to  
15 improved performance. And this was in response to  
16 a view that was current at that time, that  
17 reserves replacement for 2002 was not likely to be  
18 meeting the targets that we spoke about earlier.

19 So that took quite some considerable  
20 time, and Mr. Roosch also indicated to me a number  
21 of areas where he suggested that I might, during  
22 the course of my job, spend some time  
23 investigating, further verifying the reserves  
24 statements that had been made by the -- in  
25 relation to certain fields or companies.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 Essentially the topics that we discussed there, by  
3 and large -- well, I think all of the topics we  
4 discussed are featured on my first draft of the  
5 catalog that we referred to.

6 Q Do you recall in your discussions with  
7 Mr. Roosch any particular operating units that he  
8 thought you should address or bring your attention  
9 to?

10 A SPDC, Nigeria was one, and we can  
11 discuss it in more detail, I'm sure, later, but a  
12 general operating unit level, I don't recall any  
13 other particular operating unit being singled out  
14 at that particular point in time, though obviously  
15 there were other fields and specific field  
16 bookings that he mentioned as well.

17 Q What was it about SPDC that he mentioned  
18 to you?

19 A There was a situation with SPDC in  
20 which, if one examined the proved reserves, and in  
21 particular this is for oil, the oil proved  
22 reserves for SPDC, in order to produce those  
23 reserves during the remaining lifetime of the  
24 production license, it would have required a  
25 substantial increase in production rates simply to

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 enable the reserves to be produced in time.

3 The production licenses were due to

4 expire in 2019, and the volume of reserves that  
5 were booked by SPDC implied that I think a --  
6 well, a substantial increase in production rate  
7 was required from the then level, the sort of 2001  
8 level, in order to produce those volumes. He  
9 brought that to my attention, and I took some  
10 steps subsequently to investigate that further.

11 Q And what steps did you subsequently take  
12 to investigate the issue further?

13 A Well, first of all, during 2002 and as  
14 part of the business plan -- very soon after I got  
15 into the job, we got into the cycle of collecting  
16 data for the business plan, so I'd like to  
17 characterize what I say next in the context that  
18 it was a very busy time because of all this data  
19 coming in. However, as part of the submission for  
20 SPDC, I was, of course, very interested to see  
21 whether their business plan submission would  
22 support the idea that the production rate would  
23 increase so as to enable the production of the  
24 proved reserves, and indeed it did. They did show  
25 quite a substantial production rate increase over  
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2 the five-year planning period.

3 Q Did you -- I'm sorry. Go ahead.

4 A So I mean that in itself, of course,  
5 doesn't necessarily set one's mind at rest, so I  
6 undertook further investigations to understand  
7 what was the, uh, the basis that SPDC believed  
8 that these production gains would actually occur,  
9 given that in recent years they had successively  
10 submitted business plans that showed similar  
11 increases in production rate which hadn't  
12 materialized.

13 So I guess the nature of my  
14 investigation was to challenge or to ask questions  
15 of the people submitting this data in SPDC,  
16 together with the people compiling the reserves  
17 data, to try and probe, understand better the  
18 basis, the foundation for the projected production  
19 increase, and I would summarize the answers that I  
20 got in the sense that the people who are



21 responding to these questions gave the impression  
22 that they firmly believed that this production  
23 increase was real.

24 They pointed to specific projects that  
25 were in progress, that were in the process of  
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2 being executed, that once they came on-stream in  
3 the next one, two, three years, whatever, would  
4 generate the increases in production that they're  
5 talking about, and so the very firm feedback I got  
6 was that the people in SPDC believed their  
7 business plan, and the business plan moreover was  
8 seen as being credible at the time.

9 Q I take it you had some skepticism about  
10 the achievability of the business plan.

11 MR. TUTTLE: Objection to form.

12 BY MR. HABER:

13 Q Is that correct?

14 A Well, I think that's evident from the  
15 fact that I asked questions of SPDC to try to  
16 satisfy myself that at least there was some  
17 foundation behind the plan. So to a degree my  
18 skepticism was allayed by the responses that I got  
19 at that time, in the middle of 2002, but  
20 subsequently there was a -- a study was commenced  
21 to have a deeper look at the reserves portfolio in  
22 SPDC, which I firmly encouraged.

23 A study team was set up to look in more  
24 detail at the basis for the reserves estimate,  
25 which I completely supported and was very  
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2 interested in the outcome of, and to a large  
3 extent I came to rely then on the results of that  
4 study to help me gain further information on the,  
5 the status of the proved reserves balance in SPDC.

6 That study didn't actually report out.  
7 It was in progress. It started off in 2002, was  
8 in progress all the way through 2003 until  
9 relatively late in 2003, and it was largely as a  
10 result of the conclusions of that study, which  
11 indicated that reserves were overstated in SPDC,



12 that we then took the corrective action in 2000 --  
13 well, at the end of 2003 to adjust the reserves  
14 balance for Nigeria.

15 Q Now, this study team; are you referring  
16 to the reserves maturation team, or is that a  
17 different study team?

18 A Frankly, I can't remember what the  
19 official name of the team was. We always referred  
20 to it as the Kluesner team, given that it was led  
21 by a man called Dave Kluesner.

22 Q Uh-huh. Other than speaking with  
23 Mr. Roosch -- again talking about this handover  
24 transition period -- did you speak with anyone  
25 else about what you could expect in the role as  
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2 Group Reserves Coordinator?

3 A I don't think I can recall any instances  
4 that would answer your question.

5 Q Do you recall reviewing any documents,  
6 when you first started, to get yourself acclimated  
7 to the position?

8 A Well, yes. I mean I certainly remember  
9 reading many, many documents as part of that  
10 initial period: The previous year's business  
11 plan; the guidelines that -- the revised  
12 guidelines that Jan-Willem Roosch had prepared  
13 immediately prior to my arrival; documentation,  
14 I'm sure I reviewed documentation of the end-year  
15 2002 reserves balance; the data, the information  
16 in support of the roadmap that I referred to  
17 previously; so many different types of documents.

18 Q Do you recall reviewing any of Anton  
19 Barendregt's audit opinions from prior years?

20 A At that time, no, I don't think I did.

21 Q I'm going to hand you what was  
22 previously marked as Exhibit 6 in the Roosch  
23 deposition.

24 MR. TUTTLE: Do you want to mark it as a  
25 new one? I don't particularly care.

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2 MR. HABER: I don't think we need to.

3 MR. TUTTLE: Fine with me. There's

4 comments from the peanut gallery.

5 MR. HABER: We'll mark it as Pay Exhibit

6 2.

7 (Exhibit No. 2 was marked for

8 identification and attached to the deposition

9 transcript.)

10 MR. HABER: Just for the record, while

11 Mr. Pay is reviewing this document, what we've

12 marked as Pay Exhibit 2 is also a document that

13 was previously marked as Roosch Exhibit 6. It's a

14 document from Jan-Willem Roosch to Peter van Driel

15 and Petra van Langeveld. It's dated March 4,

16 2002, and I can't -- the subject line is in Dutch,

17 I believe, but the attachment says "Roadmap

18 Detail." There's no Bates numbers, because this

19 was produced from a native hard drive that was

20 given to us by Shell, but in the upper left-hand

21 corner of the first page is a Summation

22 identification number, which reads 104905929.

23 BY MR. HABER:

24 Q Mr. Pay, have you seen this document

25 before today?

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2 A I don't recall whether I've seen this

3 specific document, but it speaks about the issues

4 that I've already mentioned were -- that I

5 discussed with Jan-Willem in terms of the roadmap.

6 Q And do you have reason to believe,

7 sitting here today, that this is the roadmap that

8 you and he discussed back in or about May of 2002?

9 A I recognize many of the issues that are

10 mentioned here, yes.

11 Q If you could turn the page to the second

12 page of the document, the one that has in the

13 title "Reserves Replacement 2002," question

14 mark --

15 A Yeah.

16 Q -- the first sentence says, "ExCom

17 wishes to have a roadmap to a 100% (proved)

18 reserves replacement ratio."

19 Do you know if this roadmap was given to

20 the ExCom at any time during your tenure as GRC?

21 A In this form and in this style of  
22 documentation, I'm not aware that it was.  
23 Certainly during my tenure, however, I would have  
24 -- I did take some of these opportunities that are  
25 mentioned here and represent to ExCom that they  
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2 were opportunities for improving performance in  
3 2002, and I believe I wrote a report, for example,  
4 in July, and some of those opportunities were  
5 included.

6 Q Do you know if Mr. Roosch had submitted  
7 this roadmap to the ExCom before you formally took  
8 over as Group Reserves Coordinator?

9 A I don't know if he did or not.

10 Q If you look at the discussion under  
11 "Australia," under the -- under "Australia," the  
12 third line, it says, "Most of the Gorgon proved  
13 reserves (500 million boe) however seem  
14 'stranded.'"

15 Do you have an understanding of what  
16 that means?

17 A Stranded in the context of gas reserves  
18 implies that there is difficulty in -- well, the  
19 gas reserves are located a long distance from  
20 where their markets are, where the market for the  
21 gas is, and therefore, in order to bring those gas  
22 reserves to market, one needs a whole chain of  
23 distribution to connect the reserves with the  
24 market, so where that chain does not currently  
25 readily exist, the term "stranded" is generally  
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2 applied to label such reserves.

3 Q And what was your understanding as to  
4 why that chain did not then exist?

5 A When I read this, I didn't know.

6 Q Subsequent to this roadmap, what did you  
7 learn?

8 A Well, the Gorgon booking was a matter  
9 that I discussed periodically through the  
10 subsequent months, seeking to understand what was

11 the reason why the reserves had been booked in the  
12 first place and why the project did not seem to be  
13 proceeding according to the timetable that had  
14 originally been envisaged and what the forward  
15 plans were for the project.

16 So as a result of those inquiries that I  
17 made to Shell Development Australia principally, I  
18 came to understand that the reserves had been  
19 booked in 1997 on a view that was held at that  
20 time that FID, project sanction, the creation of  
21 this whole distribution plan that I was referring  
22 to, was imminent; that Letters of Intent  
23 expressing such intentions had been exchanged with  
24 various buyers of the gas, of the LNG product, but  
25 that unfortunately in 1998 there was a downturn in  
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2 the Asian Pacific economy which caused the project  
3 to be deferred or stalled.

4 And that was still the situation at the  
5 time that we're talking about here in 2002, and so  
6 I inquired of SDA, Shell Development Australia,  
7 what the forward plans were, and they submitted to  
8 me the view that the project would reach sanction,  
9 in their opinion, within the next year or two  
10 years, I believe during 2003. That being the  
11 case, I was reasonably assured that the project  
12 was likely to resume progress in a relatively near  
13 term.

14 Q At the time that the Gorgon gas had been  
15 booked, do you know if there was any Letter of  
16 Intent that was actually signed by a buyer of the  
17 gas?

18 A I was given to believe that there had  
19 been, but I don't recall ever seeing such a  
20 letter.

21 Q Did anyone ever provide you with a  
22 signed Letter of Intent?

23 A No, I don't think they did. I --

24 Q I'm sorry?

25 A I think I asked for it.

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2 Q Who did you ask?

3 A Would either have been Sarah Bell in  
4 Australia, who was my main contact there -- Sarah  
5 Bell, B-E-L-L -- or one of her coworkers.

6 Q Had you seen any signed contract for the  
7 sale of the gas --

8 A No.

9 Q -- at the time that Gorgon was booked?

10 A No.

11 Q At the time that you became GRC and you  
12 then began your investigation into Gorgon, had you  
13 seen any signed Letter of Intent?

14 A No.

15 Q Had you seen any signed contract for the  
16 sale of gas?

17 A For the Gorgon gas specifically?

18 Q For the Gorgon gas.

19 A No.

20 Q With regard to the facilities, as I  
21 understand it, the facilities for -- to put it in  
22 your terminology, the "chain" that you talked  
23 about to get the gas to market, the facilities  
24 were to be constructed on an island called Barrow  
25 Island; is that correct?

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2 A That's what I understand.

3 Q Now, is it your understanding that  
4 Barrow Island is an environmentally protected  
5 island?

6 A I didn't know that, or --

7 Q Did you ask anyone if Barrow Island had  
8 any regulatory restrictions at the time of the  
9 Gorgon booking?

10 A No. I was aware that the due process of  
11 acquiring planning permission to build the  
12 facilities was not, was not yet resolved. That  
13 was part of the process of progressing the  
14 project, a matter that was still outstanding.

15 Q So at the time of the booking, that  
16 process had -- was still outstanding; is that  
17 correct?

18 MR. TUTTLE: At the time of the original

19 booking?

20 BY MR. HABER:

21 Q Yes.

22 A I don't know if there were any other  
23 agreements that had been made at that time that  
24 might subsequently have lapsed, so I don't know  
25 what the status was at the time of the original

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2 booking.

3 Q Well, at the time of the original  
4 booking, did anyone ever advise you that SDA had  
5 received all the appropriate and necessary  
6 governmental approvals for the project?

7 MR. TUTTLE: I'm sorry. You're saying  
8 did anyone advise him in 1997 or 1998 --

9 MR. HABER: No, advise him during his  
10 investigation of Gorgon, once he became GRC.

11 MR. TUTTLE: Okay. Sorry.

12 THE WITNESS: No, no such representation  
13 was made.

14 BY MR. HABER:

15 Q Did you personally investigate that  
16 issue?

17 A Only to the extent that I've described,  
18 which is really in terms of asking the question  
19 why was this booking made, and the answer was:  
20 Because FID, project sanction, was believed to be  
21 imminent. That's as far as I could get with the  
22 retained knowledge that was present in SDA, I  
23 think.

24 Q Okay. At the time of the restatement,  
25 the recategorization, had Gorgon reached FID?

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2 A No.

3 Q And at the time of the restatement or  
4 recategorization, had there been any sales  
5 contracts that had been executed for the sale of  
6 the gas from Gorgon?

7 A Not to my knowledge.

8 Q Do you know, again at the time of the  
9 restatement and recategorization, if any of the

10 facilities had been constructed on Barrow Island  
11 for the transport of the gas to market?

12 A I don't know.

13 Q Were these questions that were  
14 investigated during Project Rockford?

15 A No, not specifically.

16 Q When you had been discussing the roadmap  
17 with Mr. Roosch, did you have any reaction to the  
18 discussion about Gorgon?

19 A You're asking me what I thought of --

20 Q When you were talking during that  
21 handover period and you talked about the issues on  
22 the roadmap, did you have a reaction to Gorgon  
23 when you discussed it with Mr. Roosch?

24 A Well, it's a large number of reserves,  
25 and it surprised me in the sense that, with my

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2 then understanding of the Shell Group guidelines,  
3 that is not something that we would have booked  
4 under the then current guidelines.

5 Q Talking about Gorgon a little bit  
6 further, who was the operator of the project?

7 A I, I don't know. Oh, sorry. Yes, I do.  
8 I believe Chevron Texaco is the operator, yeah.

9 Q Do you know if Chevron Texaco booked any  
10 reserves in Gorgon?

11 A I don't know, but -- for sure, because I  
12 haven't seen, I haven't had access to Chevron  
13 Texaco's detailed reserves booking, but Shell  
14 Development Australia offered the opinion that, in  
15 their opinion, they believed Chevron Texaco had  
16 not booked reserves.

17 Q And when was this opinion communicated  
18 to you?

19 A There was a reserves, um, documentation  
20 of the reserves that Gorgon produced, given to me  
21 later in 2002, in which this statement was  
22 contained.

23 Q And who communicated this opinion?

24 A Well, as I say, the report prepared by  
25 Shell Development Australia, given to me, I should

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2 think, either by Sarah Bell or by her supervisor.

3 Q That's really what I was just wondering,  
4 if there was anyone in particular who gave you the  
5 report.

6 A Yeah.

7 MR. HABER: I am told that we are  
8 running out of videotape, so this would probably  
9 be a good time to break.

10 THE VIDEOGRAPHER: This marks the end of  
11 Tape 2 in the deposition of Mr. Pay. We are going  
12 off the record. The time is 3:28 p.m.

13 (Whereupon, a short recess was taken.)

14 THE VIDEOGRAPHER: This marks the  
15 beginning of tape 3 in the deposition of Mr. Pay.  
16 We are back on the record. The time is 3:39 p.m.

17 BY MR. HABER:

18 Q Mr. Pay, we were talking about Australia  
19 and Gorgon, and I want to bring your attention to  
20 the first line underneath "Australia" on the  
21 second page of Pay Exhibit 2. It reads, "Sunrise  
22 FLNG maturation (including FID) is expected (if  
23 successful) in 2003."

24 Do you recall what that refers to?

25 A This refers to another project, another  
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2 field in which Shell Development Australia had an  
3 interest by the name of Sunrise, and the project  
4 was -- again it's gas. It's a very large gas  
5 field, and "FLNG" refers to Floating LNG plant, so  
6 this liquefaction facility we discussed previously  
7 would have been built on a ship stationed over the  
8 offshore field. That project was proceeding. I  
9 can't tell you who was operating it, but the  
10 statement here implies that the project might  
11 reach FID within a relatively short term, 2003 as  
12 it's mentioned.

13 Q And it goes to the fourth line, and it  
14 says, "Any Sunrise booking to help 'manage' Shell  
15 Australia stranded gas exposure."

16 Do you have an understanding of what is  
17 meant there?

18 A Well, the suggestion here is that any  
19 de-booking of Gorgon might be offset by a booking  
20 of Sunrise.

21 Q Do you recall at the time that you  
22 started as Group Reserves Coordinator, that such  
23 an offset was being actively pursued?

24 MR. TUTTLE: Objection to form,  
25 foundation.

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2 You can answer.

3 THE WITNESS: The answer to the question  
4 is no, I didn't form an opinion that it was being  
5 actively pursued.

6 BY MR. HABER:

7 Q Actually, I didn't ask you if you formed  
8 an opinion, just if it was being pursued, the  
9 possible offset of Sunrise and Gorgon.

10 A Well, not by me.

11 Q Do you have an understanding of what is  
12 meant by the word "manage" in that sentence?

13 A I understand the word "manage" to mean  
14 that, in this context, if a reserves de-booking is  
15 made and there is a reserves booking to be made  
16 elsewhere, that the coincidence of those two  
17 events would yield a net zero or an attenuated  
18 effect on the reserves replacement ratio.

19 Q When you say "net zero or an attenuated  
20 effect on the reserves replacement ratio," are you  
21 referring to the fact that there would be no  
22 impact on the RRR, the Reserves Replacement Ratio?

23 MR. TUTTLE: Object to the form; calls  
24 for speculation.

25

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2 BY MR. HABER:

3 Q I'm asking for what you mean by that  
4 statement. You can answer.

5 A I think that's what I said is that in  
6 actual fact it would be attenuated.

7 Q Now, under "Nigeria (SPDC)" it says,  
8 "Target/LE zero."

9 A Uh-huh.

10 Q Do you have an understanding of what was  
11 meant with regard to that?

12 A The target for reserves addition and the  
13 latest estimate of the reserves addition for 2002  
14 is that there would be no addition or reduction in  
15 the proved reserves balance other than to take off  
16 one year of production.

17 Q Is that because there was a moratorium  
18 in place at the time?

19 MR. TUTTLE: Objection; form,  
20 foundation.

21 MR. HABER: I'll withdraw that.

22 BY MR. HABER:

23 Q Do you recall a moratorium being in  
24 place with regard to the booking of new additions  
25 of reserves in SPDC at the time you started as

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2 Group Reserves Coordinator?

3 A Yes.

4 Q Do you have an understanding as to why  
5 the moratorium was implemented?

6 A My understanding is that it was  
7 implemented in response to the issue that we  
8 discussed earlier, which was the fact that in  
9 order to produce the reserves that had already  
10 been booked within license, would require a  
11 substantial increase in production rate. My  
12 understanding is that the moratorium was  
13 introduced so as to prevent the proved reserves  
14 balance increasing further until such time as the  
15 increase in production rate had occurred and could  
16 be substantiated.

17 Q Do you know when the moratorium was  
18 implemented; when it first started, that is?

19 A Sitting here today, I can't remember  
20 exactly when. My impression is that -- my  
21 recollection is that it had been in place for at  
22 least the last two years prior to this time.

23 Q Does 2000 sound familiar as to when the  
24 moratorium was implemented?

25 A It could be, but I just can't remember

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2 with precision.

3 Q Fair enough. I'm just trying to refresh

4 your recollection.

5 So with regard to what we just read

6 under Nigeria (SPDC,) "Target/LE zero," is that a

7 result of the moratorium, to your understanding?

8 A It would be consistent with the

9 moratorium being in place.

10 Q Now, the third item says "T4/5" -- I

11 take that to mean Train 4 and 5 -- "gas projects

12 to" -- again, quote -- "'manage' proved oil (and

13 gas) reserves exposure."

14 Do you recall what you and Mr. Roosch

15 discussed with regard to that bullet point or that

16 item?

17 MR. TUTTLE: Objection; foundation.

18 BY MR. HABER:

19 Q You can answer.

20 A Just as a reference to reserves indeed

21 for the fourth and fifth LNG trains at the Bonny

22 facility, which at that time had been sanctioned,

23 were in progress, being executed, built, and no

24 gas reserves in relation to SPDC supply to those

25 trains had been booked as a result of the

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2 moratorium being in place. What's referred to

3 here is that there are legitimate reserves that

4 could be booked in relation to those trains, and

5 those reserves could be booked -- the suggestion

6 is that those reserves could be booked and then

7 other reserves de-booked, potentially, to yield a

8 zero, zero sum.

9 Q And again that would be to offset proved

10 reserves within SPDC?

11 A Yes.

12 Q And just so the record is clear, when I

13 say "offset proved reserves," I mean to offset

14 de-booking of proved reserves within SPDC.

15 A If it would be determined that such

16 de-booking would be necessary. I'm not sure it

17 says here that it is.

18 Q Well, your understanding is that would  
19 be the natural consequence of "managing," as the  
20 term is used in this document?

21 MR. TUTTLE: Objection to form;  
22 foundation. Are you asking for his understanding  
23 sitting here today reading the document --

24 MR. HABER: No.

25 MR. TUTTLE: -- or are you asking if he

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2 had a discussion with Jan-Willem Roosch about  
3 that?

4 MR. HABER: His understanding from his  
5 discussions with Jan-Willem Roosch.

6 THE WITNESS: I'm sorry. Can you repeat  
7 the question.

8 BY MR. HABER:

9 Q From your discussions with Jan-Willem  
10 Roosch, I'm just trying to understand that the  
11 consequence of managing the project would be again  
12 to yield a zero figure, if you will, on the  
13 Reserves Replacement Ratio, so if there is a  
14 de-booking of some reserves, those would be offset  
15 by whatever you could book with regard to the  
16 Trains 4 and 5 projects?

17 A My recollection of the discussion we had  
18 around this specific point was that there are  
19 genuine reserves that could be booked in relation  
20 to Train 4 and 5, and therefore, by not booking  
21 them, if, after investigation, it would transpire  
22 that there were overstated reserves elsewhere in  
23 the SPDC portfolio, that, on balance, those two  
24 effects, the failure to have booked reserves and  
25 any overstatement of reserves that might

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2 materialize, would largely offset each other, and  
3 therefore that would -- the suggestion is that you  
4 either don't book the Train 4/5 reserves or you  
5 wait until such time as you discover that a  
6 de-booking is necessary before booking the Train  
7 4/5 reserves.

8 Q And do you know what was decided; that  
9 is, to wait and see or to book?

10 A At the end of 2002?

11 Q Yes.

12 A Since the -- my recollection is that  
13 since the, the Kluesner study was in progress at  
14 that point and had not reached a firm conclusion,  
15 we took no action. We didn't book the Train 4/5  
16 reserves, nor did we change the reserves balance  
17 than to change for production.

18 Q So I take it then from that answer --  
19 and I'm just a little unsure. I take it from that  
20 answer then that there wasn't a booking and there  
21 wasn't a wait-and-see; is that correct?

22 MR. TUTTLE: Objection to form.

23 THE WITNESS: I didn't quite catch the  
24 second part of your question.

25

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2 BY MR. HABER:

3 Q I guess from our prior discussion which  
4 related to your discussion with Jan-Willem Roosch,  
5 where the decision -- where you talked about  
6 either booking the reserves from Trains 4 and 5 or  
7 waiting to see if it was needed to offset reserves  
8 that needed to be de-booked; and then in your last  
9 answer you raised the Kluesner study being in  
10 progress; and then you said that "at that point we  
11 had not reached a firm conclusion, we took no  
12 action"; and all I want to do, just so the record  
13 is clear, so you did neither; you neither booked  
14 nor took a wait-and-see approach?

15 A I would say we were taking a  
16 wait-and-see approach. We didn't want to add to  
17 the reserves for Train 4 and 5 until we knew  
18 whether or not there was a de-booking necessary.

19 Q Okay. If you go down to the next item  
20 on the roadmap, "Nigeria (SNEPCO)," first of all,  
21 is Nigeria SNEPCO a deep water or a shallow water  
22 operating unit?

23 A SNEPCO is the Shell Company in Nigeria  
24 that was established specifically to manage the



25 deep water assets that we have there.

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2 Q Now, the first sentence says, "Bonga

3 Main possibly overbooked, review pending more  
4 field data."

5 Do you recall what you and Mr. Roosch  
6 had discussed with regard to this item?

7 A I don't recall the discussion I had with  
8 Mr. Roosch on this specific item.

9 Q Do you recall who was doing a field  
10 data -- let me withdraw that. Was there someone  
11 who was collecting the field data that's being  
12 referred to in this item?

13 MR. TUTTLE: Is there a time period?  
14 Did he know then? Did he --

15 MR. HABER: Again I'm talking about his  
16 contemporaneous knowledge, so it would be  
17 May 2002.

18 MR. TUTTLE: Okay. I just want to make  
19 sure he's got that time frame.

20 MR. HABER: Absolutely.

21 THE WITNESS: By the time that I would  
22 have either read this or discussed this issue with  
23 Jan-Willem Roosch as part of my handover -- I'm  
24 struggling a little to understand your question,  
25 frankly. Can you repeat your question.

0182

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 BY MR. HABER:

3 Q Let me change it a little bit. Maybe I  
4 can get a little more clarity.

5 When you took over as Group Reserves  
6 Coordinator, do you recall any issues with regard  
7 to the Bonga Main project in SNEPCO?

8 A Okay. I recall that Jan-Willem  
9 mentioned to me the SNEPCO assets as being one of  
10 the items on the roadmap and also one of the items  
11 that I should take an interest in, so I don't  
12 recall that, at the time of the brief discussion I  
13 had with Jan-Willem Roosch on this matter in  
14 May 2002, that I knew exactly who was responsible  
15 for what, beyond, you know, it's a SNEPCO asset,

16 therefore it's SNEPCO, who would be responsible  
17 for the field data, but I wasn't at that time  
18 aware of precisely who was involved in dealing  
19 with the SNEPCO asset.

20 Q Uh-huh. Subsequent to the time that you  
21 started in the position, did you undertake an  
22 investigation of the Bonga Main bookings?

23 A I established contact with Sean  
24 McFadden, who worked in SNEPCO, and with his  
25 supervisor, Tunde Ogunaike -- I'll write that down  
0183

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 if you need me to -- whose names had been made  
3 aware to me or who had contacted me in relation to  
4 reserves assessment and project progress for the  
5 SNEPCO assets. I had contact with them between  
6 May and July 2002, as a result of which I was  
7 invited to a review of the reserves estimates for  
8 all of the SNEPCO assets, which took place in  
9 Houston, I believe, in early July 2002.

10 Q Now, was this a meeting that occurred in  
11 Houston?

12 A Yes, it was.

13 Q Who attended this meeting?

14 A I did, Sean McFadden did, and various  
15 members of the study team that were based in  
16 Houston at the time.

17 Q Was this study team Shell Deepwater  
18 Services?

19 A I believe they all worked for that  
20 organization, yes.

21 Q And Shell Deepwater Services is located  
22 in Houston, to your knowledge?

23 A To my knowledge, yes.

24 Q Do you recall what the outcome of that  
25 meeting was?

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A The meeting was held over two or three  
3 days, during which time we spent -- I spent time  
4 with each of three study teams who each were  
5 working on different assets of SNEPCO, and the  
6 bulk of the discussion was around the existing

7 proved reserves estimate and seeking my guidance  
8 on how reserves estimation should continue in the  
9 future. There were some areas of concern  
10 highlighted and I think documented in a post-  
11 meeting note that was written.

12 At the time we -- bearing in mind I was  
13 relatively fresh in the job, and I didn't want to  
14 throw my weight around too much at the time, we  
15 made the recommendation not to do anything hasty,  
16 as it were, but to keep the bookings as they were,  
17 but generally to resist any, uh, any increases in  
18 reserves that might have been contemplated. And  
19 then through the remainder of the year I spent  
20 time looking into matters in more detail.

21 Also, there was, I believe, an audit of  
22 the assets by Mr. Barendregt, and so that through  
23 the remainder of the year we came to the  
24 conclusion that some of the reserves indicated  
25 here had been overstated, and we de-booked.

0185

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q Now, you mentioned that during the  
3 meeting there were some areas, areas of concern  
4 that were highlighted. Do you recall what those  
5 areas of concern were?

6 A Specifically two. One was in relation  
7 to the estimate of proved reserves that ExxonMobil  
8 appeared to be advocating for the Erha Field,  
9 which they operated, where the study team  
10 presented to me an opinion that the ExxonMobil  
11 estimate was too high. And I agreed with them,  
12 but as I recall that, to adopt the ExxonMobil  
13 estimate would have been to increase our reserves  
14 estimate, whereas, in fact, on the same asset I  
15 think there was a proved area dispute, a dispute  
16 as to how the proved area should be assigned, and  
17 so there was some discussion also -- two  
18 discussion areas: One, whether or not to adopt  
19 the Erha ExxonMobil estimate, and secondly, to  
20 determine whether or not the proved area had been  
21 set correctly. Had the ExxonMobil estimate been  
22 adopted, we would have increased our booking. Had  
23 we adjusted our proved area estimate to make it

24 smaller, our booking would have decreased.

25 My recommendation at the time I think

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 was to do nothing for the time being, but on

3 further investigation through the year, I and I

4 think the Reserves Auditor came to the conclusion

5 that certainly the Exxon estimate couldn't be

6 supported and that, furthermore, the negative

7 change was appropriate, and we de-booked some

8 reserves there.

9 The other issue that came up was that in

10 the Bonga Field proved reserves had been booked in

11 relation to a number of reservoirs or reservoir

12 elements, which, whilst clearly defined using

13 seismic data, had not actually been penetrated

14 with a well, and these are referred to as the

15 "In-Field Opportunities," IFOs. And again, whilst

16 I was persuaded by the strength of the seismic

17 data and agreed at a technical level with the

18 project team that there almost certainly is oil

19 present in those bodies, we came to the conclusion

20 later in the year that actually, since they

21 haven't been penetrated with a bit and since we

22 were aware that the SEC frowned on the use of

23 seismic data, those volumes should be de-booked,

24 and they were.

25

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 (Exhibit No. 3 was marked for

3 identification and attached to the deposition

4 transcript.)

5 BY MR. HABER:

6 Q Mr. Pay, I ask you to take a look at

7 what we've just marked as Pay Exhibit 3, and it's

8 titled "Note for Information, CMD 11th

9 February 2002, EP Hydrocarbon Resources Update,

10 1/2002." It's Bates range -- there are two of

11 them -- is V00090455 through V00090463, and the

12 other Bates range is TT000298 through TT000306.

13 I just ask you to take a moment to look

14 at this document.

15 Mr. Pay, have you seen this document

16 before today?

17 A Yes.

18 Q And when did you see it?

19 A I recall it being shown to me as part of  
20 previous, my previous deposition with the FSA.

21 Q Other than the interview with the FSA,  
22 do you recall having reviewed this document during  
23 your tenure as GRC?

24 A I don't specifically remember looking at  
25 this document in May 2002 or at any other

0188

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 particular time. However, I'm familiar with its  
3 content.

4 Q And what is the basis of your  
5 familiarity with the content?

6 A It concerns primarily the statement to  
7 the report that I referred to earlier that would  
8 have been prepared to inform management of the  
9 status of the group's reserves inventory at the  
10 end of 2001, which is a routine report prepared by  
11 the Reserves Coordinator.

12 Q Do you recall reviewing this document in  
13 connection with the handover period between  
14 Mr. Roosch and yourself?

15 A I don't recall specifically sitting down  
16 and looking at it; however --

17 Q I was just trying to refresh your  
18 recollection.

19 A Yeah, I know, and I guess it's very  
20 likely that I did sit down with this specific  
21 document, but I don't recall actually doing so,  
22 but there are many places in our data system where  
23 the information that is contained in here can be  
24 found and which I worked with actively, you know,  
25 subsequently in my job, so I'm very familiar with

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 the content.

3 Q If you turn to the second page --

4 A Yes.

5 Q -- of the exhibit, on the bottom, under

6 "Exposures," there's a reference to the

7 "Securities and Exchange Commission (SEC)

8 Alignment." Do you see that?

9 A Yes.

10 Q The reference -- withdrawn. In the --  
11 in the discussion there are a number of operating  
12 units that are identified. There's Gorgon, Ormen  
13 Lange, Angola and Waddenzee. We've discussed  
14 Gorgon and we've discussed some of Ormen Lange.

15 With regard to Ormen Lange, is there  
16 anything else that you recall about Ormen Lange  
17 that you haven't already testified to today that  
18 falls within this discussion on Pay Exhibit 2?

19 MR. TUTTLE: Objection to form.

20 BY MR. HABER:

21 Q You can answer.

22 A Yeah, well, the issue that is raised  
23 here actually is in relation to the timing of the  
24 reserves booking. The items that are listed here  
25 were part of the list of issues that we discussed

0190

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 earlier that Jan-Willem brought to my attention as  
3 warranting further investigation. So the timing  
4 of the reserves booking for Ormen Lange is  
5 representative to me as being early compared with  
6 the clarification of the SEC rules that was  
7 received during 2001.

8 Q And when you say "early," what do you  
9 mean by that?

10 A Before Final Investment Decision. It's  
11 a large gas resource that doesn't have ready  
12 access to market, and therefore it could be  
13 vulnerable to an interpretation of the SEC's  
14 guidance concerning "frontier assets" I think  
15 they're referred to, "frontier areas."

16 Q And you see here there's a reference to  
17 "potential environmental, political or commercial  
18 'showstoppers.'" What is your understanding of  
19 what that means?

20 A Now that you draw my attention to it,  
21 indeed there was a issue with Ormen Lange. I  
22 recall there was an issue with Ormen Lange, and



23 that for that particular one, there was some  
24 residual uncertainty at that time as to whether  
25 the project would go ahead in view of the fact  
0191

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 that the field sat underneath a, uh, a subsea  
3 escarpment which may be unstable and destabilized  
4 by the development of the field and the extraction  
5 of gas.

6 That raised concerns that essentially a  
7 collapse of the slope could trigger a tidal wave,  
8 which would be rather disastrous, and that that  
9 issue, until it had been resolved, was a potential  
10 "showstopper" for the development as well. So the  
11 timing of the reserves was in relation to the fact  
12 that project sanction hadn't been taken, and  
13 project sanction hadn't been taken pending the  
14 resolution of this particular concern.

15 Q Do you recall how much volume was  
16 booked?

17 A I believe it was -- it was more than a  
18 hundred million barrels of oil equivalent. It may  
19 have been 120 or 140.

20 Q Now, is Ormen Lange an oil or a gas  
21 field?

22 A Gas.

23 Q Do you recall the issue surrounding  
24 Angola? Was that a timing issue as well?

25 A Yes.

0192

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q And what do you recall about Angola?

3 A Again, project sanction hadn't been  
4 taken, and I believe there was an issue relating  
5 to the disposal of gas. This was a combined oil  
6 and gas development, and the potential issue  
7 around that project was that no clear solution had  
8 yet been identified for disposing of the gas.

9 Q And in connection with your work in  
10 Project Rockford, did you review the Angola  
11 booking?

12 A By the time that -- in fact, I think by  
13 the end of 2002, project sanction had by then

14 actually been taken on the Block 18 development in  
15 Angola, so there was no compliance issue by the  
16 end of 2002. However, during the recategorization  
17 of Project Rockford, we restated the booking such  
18 that it first appeared in our books at the end of  
19 2002 instead of in prior years, as had previously  
20 been the case.

21 Q And what was the reason for doing that?

22 A To bring the timing of the reserves  
23 addition to coincide with Final Investment  
24 Decision.

25 Q Were there other fields where, as part

0193

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 of Rockford, that was done?

3 A Yes.

4 Q Which fields?

5 A I struggle to remember precisely, but  
6 certainly my memory is refreshed. Ormen Lange was  
7 one of them. Bonga was another. Erha was  
8 another.

9 Q Erha was in SNEPCO Nigeria?

10 A Yes.

11 Q Other than Bonga and Erha, Ormen Lange,  
12 are there any other fields that you can recall?

13 A I'm sure there are, but I can't recall  
14 specifically off the top of my head now.

15 Q Again looking at this document, the next  
16 field identified is Waddenzee. I hope I'm  
17 pronouncing that correctly.

18 A Waddenzee.

19 Q Okay. Do you recall if that was a  
20 timing issue as well?

21 A Yes. The issue there was that a  
22 drilling moratorium had been in force for a number  
23 of years, preventing drilling in Waddenzee, which  
24 is a nature reserve in Holland, offshore Holland,  
25 and so the issue there was relating to the fact

0194

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 that that drilling moratorium, for environmental  
3 reasons, may ultimately prevent the project from  
4 going ahead at all.

5 Q Was it your understanding that  
6 nevertheless reserves had been booked in  
7 Waddenzee?

8 MR. TUTTLE: Objection to form.

9 BY MR. HABER:

10 Q Other than my pronunciation, you can  
11 answer it.

12 A Well, I know reserves had been booked,  
13 yes.

14 Q Were reserves, proved reserves booked in  
15 advance of FID, those issues being resolved?

16 MR. TUTTLE: Objection to form.

17 BY MR. HABER:

18 Q I asked two questions. Let me go back  
19 and ask one. I'm sorry.

20 Were proved reserves booked in advance  
21 of those issues that you just discussed resolved?

22 A The reserves had been booked, and the  
23 drilling moratorium was still in place.

24 Q Had FID been reached prior to the  
25 reserves being booked?

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A I don't know if an FID decision had  
3 actually been taken, but I, I formed myself of the  
4 opinion that even if it had, it would have lapsed  
5 by now, since time had elapsed in the meantime,  
6 and there was now this one issue preventing the  
7 project from going ahead, which I took some  
8 investigation up with, with the operating company  
9 concerned.

10 Q And when you say that you "took some  
11 investigation," is that during your tenure as  
12 Group Reserves Coordinator?

13 A Yes.

14 Q Do you recall when?

15 A During 2002.

16 Q And were reserves ultimately de-booked  
17 as part of the recategorization?

18 A Yes.

19 Q And again do you recall how much the  
20 volume was?

21 A It was 25 million barrels of oil

22 equivalent.

23 Q Now, underneath the discussion of "SEC  
24 Alignment," it says, "End of license," and there's  
25 a reference to Oman PDO, Abu Dhabi and Nigeria  
0196

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 SPDC. Do you recall what the issue was with  
3 regard to license expiry in Oman?

4 A Well, the issue was that the license was  
5 due to expire in 2012.

6 Q And what impact, if any, would that have  
7 on reserves that had been booked as proved in PDO  
8 Oman?

9 MR. TUTTLE: Objection to form.

10 BY MR. HABER:

11 Q You can answer.

12 A Yeah, that of itself didn't have any  
13 direct influence on the reserves per se, but I  
14 would say the issue is similar to that in Nigeria,  
15 which was -- well, in this case, high production,  
16 a certain production rate had to be sustained  
17 throughout the remaining life of the license in  
18 order to produce the proved reserves. Given that  
19 the license was expiring, there was no leeway, as  
20 it were, to produce at a lower rate over a longer  
21 period of time to still produce the same reserves  
22 volume. So the license expiry was an issue  
23 limiting the amount of time over which the proved  
24 reserves had to be produced.

25 Q And if the production rate declined,  
0197

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 then that would just expose the amount of reserves  
3 that had already been booked as proved; is that  
4 correct? Am I understanding the issue correctly?

5 MR. TUTTLE: Objection to form;  
6 foundation.

7 THE WITNESS: Well, the issue was such  
8 that if you did not sustain -- if PDO could not  
9 sustain a certain production at a certain level,  
10 it would physically not produce the volume of  
11 reserves that had been booked.

12 BY MR. HABER:

13 Q Okay. Now, if you look at the two  
14 exposures, the "SEC Alignment" and the "End of  
15 License," the SEC Alignment refers to a possible  
16 exposure of -- I believe this would be one billion  
17 boe. And the end of license talks about a  
18 possible exposure of 1.3 billion boe; is that  
19 correct? Am I reading that correctly?

20 A Yes.

21 MR. TUTTLE: Objection to form. The  
22 documents speak for themselves.

23 BY MR. HABER:

24 Q So combined, the CMD, who this note went  
25 to, was being advised of a possible exposure of

0198

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 2.3 billion boe; is that correct?

3 MR. TUTTLE: Objection to form;  
4 foundation.

5 BY MR. HABER:

6 Q You can answer.

7 MR. TUTTLE: Are you asking him for his  
8 understanding sitting here today?

9 MR. HABER: Well, now it's sitting here  
10 today, yes.

11 THE WITNESS: Well, to the extent that I  
12 presume that members of the CMD received that  
13 information, then that is a conclusion they could  
14 easily have reached.

15 BY MR. HABER:

16 Q But in terms of the information in the  
17 note, it's your understanding that the content of  
18 the note is conveying a possible exposure of  
19 2.3 billion boe; is that correct?

20 MR. TUTTLE: Same objection. Again,  
21 time period?

22 BY MR. HABER:

23 Q I'm talking about now.

24 A Well, I think it's self-evident from the  
25 note.

0199

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Q And was this your understanding during  
3 your tenure as GRC when you looked at this

4 document?

5 MR. TUTTLE: Objection to form;  
6 foundation.

7 BY MR. HABER:

8 Q You testified earlier that you are  
9 familiar with the content of this document.

10 MR. TUTTLE: Yeah, but I don't think he  
11 ever said he looked at this document.

12 BY MR. HABER:

13 Q I'm talking about the content, so in  
14 terms of content, just so we're clear, the  
15 content -- was it your understanding that in or  
16 about the time of this note, there was a possible  
17 exposure of approximately 2.3 billion boe?

18 A I'm sorry. Can you repeat the question.

19 Q Sure. In terms of the content of the  
20 exposure portion of this document that we're  
21 talking about, was it your understanding that in  
22 or about the time of the note, February 2002,  
23 there was a possible exposure of approximately  
24 2.3 billion boe?

25 MR. TUTTLE: Objection to form, to the  
0200

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 foundation in terms of the timing. You're asking  
3 him if he had an understanding at or about the  
4 time of the note in February 2002, that there was  
5 an exposure?

6 MR. HABER: During his time as GRC, he  
7 said he was familiar with the content of the note,  
8 and all I'm trying to ascertain is: Did that  
9 familiarity, as he understood it, show that there  
10 was a possible exposure of 2.3 billion boe?

11 MR. FERRARA: Sorry. Just for a point  
12 of clarification, and perhaps this is why the  
13 witness is struggling with this question. Do you  
14 mean, when you say "exposure," a net exposure --  
15 that is, when you take all of the potential pluses  
16 against all the minuses -- or do you mean exposure  
17 just as it appears on the bottom of this page,  
18 without going through the rest of the document?  
19 It's, it's a little difficult to, when he's  
20 testified for so long about plusses and minuses,



21 to come and ask this question what's the exposure,  
22 2.3 billion.

23 MR. HABER: We're not talking about net.  
24 I'm not talking about net, and I don't think this  
25 discussion here is referencing that. I think it's  
0201

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 just talking about what the amount is.

3 MR. TUTTLE: I guess my problem is he's  
4 testified that he's familiar with the content from  
5 looking at all the data sources he had available  
6 as the GRC. You're trying to, without reference  
7 to a document that he's testified he doesn't  
8 recall ever reading until he's examined by the FSA  
9 on it --

10 MR. HABER: That's not what he said, but  
11 go ahead.

12 MR. TUTTLE: That's exactly what he  
13 said. You're trying to ask him about two specific  
14 sentences in that document and ask him if, from  
15 all the data sources, he reached the same  
16 conclusion at the time; is that what you're  
17 looking for?

18 MR. HABER: Not that he reached the same  
19 conclusion, but at that time, from his review of  
20 all the various data sources.

21 BY MR. HABER:

22 Q Were you aware that there was a possible  
23 exposure of 2.3 billion boe? And the time period  
24 would be in or about this February, so when you're  
25 in the GRC position you're gathering all that  
0202

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 information, and now you're looking back, and I'm  
3 just trying to know, from a temporal standpoint,  
4 you're in your position, looking back, looking  
5 back from all the information, were you aware that  
6 in or about February 2002, there was a possible  
7 exposure of approximately 2.3 billion boe?

8 A The truthful answer to your question is  
9 no, there is not a specific piece of information  
10 that was current in my head in or around this  
11 time.

12 Q Well, in or about the time -- I'm not  
13 focusing on February 2002; I'm focusing during  
14 your tenure as Group Reserves Coordinator. Were  
15 you aware at an earlier point in time, before you  
16 got into that position, that there was a possible  
17 exposure of 2.3 billion boe?

18 A Before I got into the position?

19 Q Yeah, something that you learned once  
20 you got into the position.

21 A I'm sorry. You're asking --

22 MR. TUTTLE: Object to the form. I just  
23 don't understand the question.

24 MR. HABER: You know what? We'll leave  
25 this. We'll leave this topic.

0203

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 BY MR. HABER:

3 Q Who is Walter van der Vijver?

4 A Walter van der Vijver, at the time I  
5 started the job of Group Reserves Coordinator and  
6 throughout the time until he left Group Service,  
7 was the Chief Executive Officer of Exploration and  
8 Production in Shell.

9 Q When you first started in May of 2002,  
10 did you meet with Mr. Van der Vijver?

11 A Shortly after I started in May 2002, it  
12 probably was some weeks after my first day, so it  
13 was probably in June or July.

14 Q Do you recall the reason for meeting  
15 with Mr. Van der Vijver in that June or July 2002  
16 period?

17 A The reason we met was -- as I think just  
18 flipping, reading, skimming through this document,  
19 there is some reference made to an analysis that  
20 is ongoing concerning the maturation of resource  
21 volumes through the categorization process that I  
22 referred to earlier. So opportunities to bring  
23 reserves bookings earlier into the balance by  
24 progressing certain projects that would yield  
25 those reserves bookings, understanding why other

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 reserves or resource volume maturation was perhaps

3 slower than had been hoped.

4 So an analysis had been kicked off by  
5 the time I arrived, and I carried on with that  
6 analysis and presented some conclusions, which I  
7 would characterize as helping to explain why  
8 proved reserves were not being added to the  
9 balance from our own portfolio at a speed or at a  
10 rate that seemed -- that had been hoped for, and  
11 also what the impact of that was likely to be on  
12 2002 and 2003 reserves additions. So the meeting  
13 was to present the conclusions of that study to  
14 Mr. Van der Vijver.

15 Q Did anyone else attend this meeting?

16 A Yes. I believe Malcolm Harper was  
17 present, and I recall another person being  
18 present. I can't remember specifically who it  
19 was, though.

20 Q Do you recall where the meeting was  
21 held?

22 A In Mr. Van der Vijver's office.

23 Q Now, when you met with Mr. Van der  
24 Vijver generally, were meetings with him scheduled  
25 or were they impromptu, "pick up the phone, John,  
0205

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 can you come down to the office"? How did that  
3 work?

4 A This particular one was scheduled in  
5 advance. Generally that is how it would have  
6 been. There were occasions when he came to visit  
7 me at my desk or he picked up the phone and said,  
8 "Can you come see me, I want to talk about  
9 something." Those occasions did happen from time  
10 to time, but normally there would be advance  
11 warning that he would desire to meet, and we would  
12 set a time.

13 Q Now, during this meeting do you recall  
14 discussion of any of the fields that were  
15 mentioned in this Note for Information that we've  
16 just been talking about?

17 A As part of the summary that I presented  
18 to Mr. Van der Vijver, there was a summary of some  
19 elements of the proved reserves inventory,

20 particularly in relation to, to gas, and I think

21 Gorgon was one of the fields I mentioned.

22 Q Do you recall if Mr. Van der Vijver had  
23 any reaction to the discussion concerning Gorgon?

24 A When Mr. Van der Vijver was shown  
25 information indicating that proved reserves had

0206

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 been booked for Gorgon, his response was to -- his  
3 actual words were, "Whoever booked that should be  
4 fired."

5 Q How did you respond when you heard that?

6 A I was, well, a little taken aback, but  
7 the way in which the statement was delivered was  
8 conversational in manner. I didn't take it to  
9 mean that he literally meant the person should be  
10 fired. I took it to be his expression of surprise  
11 that, in relation to our then understanding of the  
12 reserves booking requirements, such a booking  
13 perhaps ought not to have been made.

14 Q During this discussion did you and he  
15 discuss the size or the amount of gas that was  
16 involved?

17 A Yes. He was made aware of the volume.

18 Q Did he provide any feedback with regard  
19 to how much gas was potentially exposed?

20 A Did he provide any feedback?

21 Q Yeah, did he say anything other than,  
22 you know, whoever booked Gorgon should be fired?

23 A No. The discussion then moved on.

24 Q Did he task you with doing any follow-up  
25 on Gorgon?

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 A Not at that meeting, no.

3 Q During this meeting was there any  
4 discussion about whether the reserves in Gorgon  
5 should be de-booked?

6 A During that meeting?

7 Q Yes.

8 A No, not that I recall.

9 Q Do you know whether Mr. Van der Vijver  
10 had conveyed the message that this was the first

11 time he was hearing of the exposure in Gorgon; at  
12 this meeting, that is?

13 A Conveyed the message to whom?

14 Q To the participants of the meeting.

15 A No, he didn't say so. He behaved as if  
16 he was hearing it for the first time, but he  
17 didn't say that he was hearing it for the first  
18 time.

19 Q Is it fair to say from his response that  
20 that was sort of implied?

21 A Yes.

22 Q I think you mentioned Malcolm Harper had  
23 been a participant of this meeting. Do you recall  
24 if Lorin Brass also participated?

25 A No, I don't. My uncertainty between the  
0208

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 other attendees is whether it was Lorin Brass or  
3 Jaap Nauta. I'm fairly certain it was one of  
4 them, but I don't recall which.

5 Q Do you recall if anyone had taken any  
6 notes at this meeting?

7 A No. I didn't, and I don't recall being  
8 shown any notes that anyone else might have taken.

9 MR. HABER: Why don't we take a quick  
10 short break, and then we'll persevere to the end  
11 of today.

12 THE VIDEOGRAPHER: We are going off the  
13 record. The time is 4:34 p.m.

14 (Whereupon, a short recess was taken.)

15 THE VIDEOGRAPHER: We are back on the  
16 record. The time is 4:51 p.m.

17 BY MR. HABER:

18 Q Mr. Pay, talking about Gorgon for a  
19 moment, once you were in the position as Group  
20 Reserves Coordinator, did you form an opinion of  
21 whether Gorgon should be de-booked?

22 A Yes.

23 Q And what was that opinion?

24 A I shared the opinion of several others,  
25 that while if the booking had been considered as a  
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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 first-time booking in 2002, it wouldn't have made  
3 our -- it wouldn't have complied with our internal  
4 guidelines, but the fact that it had been booked  
5 and continually booked over a period of years  
6 beforehand was -- could not be avoided as a matter  
7 of the record. Was there sufficient reason to  
8 de-book? We felt no, given that the information  
9 we had available to us was that the project would  
10 reach a state of compliance with our revised  
11 guidelines within a relatively short period of  
12 time.

13 Q And what was the basis for the  
14 information that was provided to you that the  
15 project would reach a state of compliance with  
16 your revised guidelines within a relatively short  
17 period of time?

18 MR. TUTTLE: Objection to form. Are you  
19 asking what he understood?

20 MR. HABER: What the information was  
21 that he was given.

22 MR. TUTTLE: What's the basis for it?

23 MR. HABER: Yeah.

24 MR. TUTTLE: Okay.

25 THE WITNESS: I can answer what the

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 information was that I was given, and that was a  
3 report from Shell Development Australia, as part  
4 of which a plan for the project was presented,  
5 which indicated that the project would reach  
6 sanction I believe sometime within 2003.

7 (Exhibit No. 4 was marked for  
8 identification and attached to the deposition  
9 transcript.)

10 BY MR. HABER:

11 Q While you are looking at this, Mr. Pay,  
12 we have marked as Pay Exhibit 4 a document which  
13 is an e-mail and a note. It also appears to be a  
14 draft note at that. The e-mail is from Dave  
15 Johnson. It's dated September 19, 2002, to John  
16 Pay and David Frost, with a CC to Sarah Bell and  
17 Andrew Faulkner. The subject reads "Australian  
18 Gas Reserves." It's a one-page -- I'm sorry -- a



19 two-page e-mail, again with attachments, and the  
20 Bates range -- and there are two of them. The  
21 Bates ranges are V00331064 through V00331099, and  
22 the other Bates range is PAY0701 through PAY0736.

23 A Yes.

24 Q Mr. Pay, having looked at Exhibit 4, do  
25 you recall seeing this e-mail and attachments

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 prior to today?

3 A Yes.

4 Q And if you can just generally describe  
5 the context in which you received this e-mail and  
6 the attachments.

7 A The context in which I received the  
8 e-mail was, from my perspective, in response to  
9 questions that I had raised during 2002 with  
10 principally Sarah Bell concerning the foundation  
11 for the Gorgon reserves booking.

12 Q Now, during your conversations with  
13 Sarah Bell, do you recall Sarah Bell expressing a  
14 view with regard to whether the Gorgon reserves  
15 should be de-booked?

16 A I recall her asking for my opinion, but  
17 I don't recall her specifically offering an  
18 opinion as you so described it.

19 Q Was there anyone other than Sarah Bell  
20 that you spoke to at SDA concerning the Gorgon  
21 reserves?

22 A Not that I recall. Sarah Bell was my  
23 contact point.

24 Q Do you know a Sheila Graham? Sheila  
25 Graham?

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2 A The name doesn't -- isn't familiar.

3 Q Do you know a Yeroon Ratim (phonetic)?

4 A I know Yeroon, yes.

5 Q Did you ever talk to Mr. Ratim about the  
6 Gorgon booking?

7 A At this time I don't recall speaking to  
8 him about it at all.

9 Q Did there come a time when you spoke

10 with Mr. Ratim about the booking?

11 A During the, uh, the Rockford Project he  
12 became involved in an administrative sense, helped  
13 with the administration of some of the field  
14 reviews that we were doing.

15 Q Did he at that time express a view about  
16 whether Gorgon reserves should be de-booked?

17 A Not that I recall.

18 Q Did you ask him?

19 A I don't know if I did.

20 Q If you look at the first line of Exhibit  
21 4, it's addressed to both you and David Frost, and  
22 it says, "Sarah forwarded me the copy of your note  
23 of yesterday."

24 Do you know if the reference is to a  
25 note that you had written?

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2 A He's referring to one of the attachments  
3 to the note, which is a note that I wrote. It's  
4 the first of the three attachments, beginning at  
5 Page V00331066.

6 Q In preparing this note, did you have  
7 someone assist you?

8 A Certainly I recall discussing some of  
9 the issues described here with Sarah Bell in  
10 preparation of the note. I don't recall specific  
11 discussions with other people.

12 Q Now, this note appears to be a draft,  
13 and it appears to show comments and particular  
14 additions to the document. Do you know who made  
15 those additions?

16 A I don't know exactly who made them, no.

17 Q Do you recall if they're your comments?

18 A No. I understand them to be the  
19 comments of people working in SDA, as the cover  
20 note implies.

21 Q Now, if you look at the second paragraph  
22 of the e-mail, at the bottom of that paragraph it  
23 says, "I must stress, however, that I am not at  
24 this stage looking to make a decision on the  
25 future categorization of these volumes, and would

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2 ask that you give Tim and myself the opportunity  
3 to incorporate your input before anything is  
4 passed onwards to Walter."

5 Who is the "Tim" that he's referring to?

6 A I believe that would be Tim Warren.

7 Q And what did you understand that he was  
8 looking for you to do?

9 A I must say it's not clear to me, reading  
10 it today, nor do I recall it being clear to me at  
11 the time.

12 Q That makes two of us, because it wasn't  
13 clear to me either what he was asking of you, but  
14 the last part of that sentence that I read  
15 suggests that Walter van der Vijver was  
16 considering the Gorgon booking. Do you recall if  
17 that consideration included a consideration of  
18 whether to de-book the reserves in Gorgon?

19 MR. TUTTLE: Object to form, foundation,  
20 characterization of the document.

21 You can answer.

22 THE WITNESS: Well, I'm not sure the  
23 implication that you've drawn from the final  
24 sentence is one I would agree with, from purely  
25 the way it's written, but no, this -- at this time

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 I didn't understand that Walter had any particular  
3 opinion expressed to me regarding the Gorgon  
4 reserves booking.

5 BY MR. HABER:

6 Q And when you say "at this time," you're  
7 talking about September of 2002?

8 A Yeah.

9 Q Okay. Now, you mentioned Tim Warren a  
10 moment ago. Who is Tim Warren?

11 A I believe he was the Managing Director  
12 of Shell Development Australia or was a senior  
13 manager in that regional organization. I don't  
14 remember specifically which, which job he held at  
15 that time.

16 Q And at this time, September 2002, did  
17 Mr. Warren sit on the ExCom?

18 A I don't know.

19 Q Did you ever have any discussions with  
20 Mr. Warren concerning the Gorgon booking?

21 A I don't recall ever having spoken to  
22 Mr. Warren.

23 Q And just so we're clear, when you say  
24 "ever," you mean throughout your entire tenure at  
25 Shell?

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2 A Career.

3 Q Okay. This third paragraph, Mr. Johnson  
4 refers to a presentation of the background of the  
5 bookings to "Walter" -- and I take that to mean  
6 Walter van der Vijver -- and Malcolm Brinded. Do  
7 you, uh, do you know where that presentation was  
8 made?

9 A I was given to believe at the time that  
10 the presentation had made -- been made in  
11 Australia during a visit to Australia or possibly  
12 to the region.

13 Okay. No. Sorry. The answer to the  
14 question is no, I don't know where that  
15 presentation was made.

16 Q Who is Malcolm Brinded?

17 A I don't know exactly which job he held  
18 at the time. I know that he was a senior  
19 executive in the group. I knew that he had been  
20 the Chief Executive Officer of Gas and Power,  
21 another division of the group. Precisely -- so I  
22 knew he was a senior manager is what I'm trying to  
23 say, but as to which specific position he held at  
24 that time, I don't know. I didn't know at the  
25 time and I don't know now.

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2 Q Do you know if Mr. Brinded was a member  
3 of the CMD?

4 A At this time?

5 Q At this time.

6 A I don't know if he was or not.

7 Q Do you know what the CMD is?

8 A Committee of Managing Directors.

9 Q And just generally what is the function  
10 of the CMD? Did they effectively run, at that  
11 time, the companies?

12 MR. TUTTLE: Object to the form;  
13 foundation.

14 You can answer if you know.

15 THE WITNESS: Well, I, I don't know what  
16 their documented role is. I do know that -- my,  
17 my only experience of the CMD prior to Rockford  
18 was an understanding that major project investment  
19 decisions had to be referred to CMD and sometimes  
20 beyond the Conference in order to be sanctioned.

21 BY MR. HABER:

22 Q What is the Conference?

23 A I understand the Conference to be a --  
24 composed of former CMD members.

25 Q If you look at the third sentence of

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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 that third paragraph, it says, "Malcolm commented  
3 that had Gorgon volumes been currently classed as  
4 SFR, we would not currently be able to reclassify  
5 these volumes as reserves." Do you have an  
6 understanding of what Mr. Johnson meant by that?

7 A What Mr. Johnson meant, my understanding  
8 is, as I read it today and as I read it then, that  
9 Mr. Brinded had expressed the opinion that's  
10 stated.

11 Q Do you recall discussing with  
12 Mr. Johnson anything else with regard to the  
13 comments that are attributed to Mr. Brinded in  
14 this exhibit?

15 A No, I don't recall any other discussion.

16 Q And if I understand that sentence  
17 correctly, does that mean that if the reserves  
18 were classified as SFR, they would not be able to  
19 be booked as proved? Is that what that means,  
20 moving it from a classification of SFR to  
21 reserves?

22 MR. TUTTLE: Objection to form;  
23 characterization of the document.

24 BY MR. HABER:

25 Q I'm just trying to understand what that

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 sentence is referring to, moving it from one  
3 classification to another.

4 A I, I read this as being consistent with  
5 the statement I made earlier, that there was a  
6 prevailing opinion, evidently endorsed by two  
7 senior figures in our organization, that if the  
8 Gorgon project had been considered in 2002 with  
9 reference to the then prevailing guidelines, it  
10 would not have qualified for reserves booking, but  
11 that since in prior years the booking had been  
12 made and since a plan existed to reach a condition  
13 of compliance within say a two-year period, it was  
14 not seen at that time to be appropriate to  
15 de-book, only to rebook later within a short  
16 period of time.

17 Q Now, other than with regard to Gorgon,  
18 was that a, a view within Shell that was  
19 communicated during your tenure as Group Reserves  
20 Coordinator?

21 MS. WICKHEM: Object to form.

22 MR. TUTTLE: Same objection.

23 BY MR. HABER:

24 Q What I'm referring to is that it would  
25 not be appropriate to de-book, only to rebook

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 later within a short period of time.

3 MS. WICKHEM: Same objection.

4 BY MR. HABER:

5 Q You can answer.

6 A My perception is that there was a  
7 prevailing shared opinion that it would have been  
8 an odd thing to do, to make changes, negative  
9 changes, to the reserves balance in the full  
10 expectation that those reserves would be added in  
11 later on, within a period -- within a short period  
12 of time, to remove them from one reporting period  
13 and add them back in the next one. I certainly  
14 considered that that was an unnecessary step to  
15 take, provided one had assurance that -- and  
16 monitored progress against activities to ensure



17 compliance in the short term. And I know many  
18 others in the company shared my opinion.

19 Q Now, did you consider, with regard to  
20 your opinion, the fact that those reserves were  
21 not compliant with Shell's guidelines? Did that  
22 make a difference, in your opinion?

23 MR. TUTTLE: Object to form; foundation.

24 THE WITNESS: I'm trying to unravel your  
25 question in my mind.

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 Well, the issue would only arise for  
3 reserves bookings that were not compliant with the  
4 current version of the guidelines. As to whether  
5 a de-booking would be made, consideration was  
6 given to the existence or not of a plan to ensure  
7 that the volumes would become compliant within a  
8 reasonable -- what we consider to be a reasonable  
9 period of time, say two years or so.

10 Now, volumes that satisfied that  
11 criteria, I thought it reasonable not to take any  
12 action on. Volumes that did not satisfy that  
13 criteria or those criteria, we did take action on.  
14 We de-booked 660 million barrels of reserves in  
15 2002, a large part of which were reserves that we  
16 had identified issues with, that did have -- not  
17 have a plan for compliance to be addressed, and  
18 therefore they were de-booked.

19 BY MR. HABER:

20 Q Do you know what the SEC's position was  
21 with regard to bookings that were no longer  
22 reasonably certain?

23 MR. TUTTLE: Objection to form,  
24 foundation, calls for speculation.

25 THE WITNESS: No, we didn't at the time

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 ask the SEC for their opinion.

3 BY MR. HABER:

4 Q Well, did you have an understanding of  
5 what the SEC requirements were if there was a  
6 booking that no longer was reasonably certain?

7 A No. We took the view from the, from the

8 business point of view primarily, that to  
9 introduce "yo-yo-ing of reserves" -- was the term  
10 that frequently would have been used -- to yo-yo  
11 reserves in and out simply because we had changed  
12 our understanding of the SEC requirements. At the  
13 time we saw that not as an appropriate response.

14 Q Did you, as the Group Reserves  
15 Coordinator, have the authority to authorize a  
16 de-booking of reserves?

17 A No. In the control system that we had,  
18 the responsibility for booking reserves rested  
19 with the operating unit and with officials within  
20 the operating unit.

21 Q Do you know if de-booking had to be  
22 approved by the ExCom?

23 A There was no process step in that time  
24 that would require that.

25 Q Did there come a time where there was  
0223

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 such a step in the process?

3 A During my tenure in the Reserves  
4 Coordinator job, I proposed introducing such a  
5 process whereby there would be a formal review of,  
6 you know, significant bookings and de-bookings at  
7 the ExCom level.

8 Q Was that proposal supported?

9 A Yes, I think -- yes, it was. We were --  
10 at the time of the recategorization, I would say  
11 we were in the process of attempting to implement  
12 that process, but I think in general it was  
13 supported is my perception, yes.

14 Q And just in terms of timing, was the  
15 proposal made before Project Rockford or after?

16 A Before.

17 Q And who did the proposal -- withdrawn.  
18 Who did you make the proposal to?

19 A To ExCom, via Lorin Brass, who had asked  
20 me to make such a proposal on behalf of ExCom.

21 Q Was this proposal something that you  
22 initiated, or was this something that Mr. Brass  
23 had initiated?

24 A Formally it was Mr. Brass who asked me

25 to draft a proposal for a reserves management

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 process, so he -- the formal sequence of events

3 was that he conveyed the request to me.

4 Q And did he give you an explanation as to

5 why he wanted such a proposal?

6 A Yes. In the discussion that took place

7 when he was instructing me to do this work, he --

8 my understanding that I took from the discussion

9 was two-fold: One, that there was a desire to,

10 for senior management to have greater involvement

11 in the process of the reserves reports of the

12 group, that there should be some form of

13 sanctioning or otherwise of major changes to

14 reserves, was part of the objective. The second

15 part of it was a desire to, where possible --

16 sorry. Can I take a step back?

17 Q Please.

18 A Shell's reserves replacement history had

19 been characterized by large, large peaks and

20 drops, and that was seen to be not in the best

21 interests of Shell in terms of the way it appeared

22 to the outside world. Comparisons were drawn with

23 Exxon, notably, who had a very stable reserves

24 replacement performance. At that time -- I'm not

25 sure how they perform now, but at that time it was

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 very likely that Exxon every year would come up

3 with say a Reserves Replacement Ratio in the range

4 of 100 to 120. That was perceived to impart to

5 Exxon a degree of reliability, trustworthiness, if

6 you like, in terms of performance going forward

7 within the market, within the financial markets,

8 investors and so forth.

9 It's a highly unusual circumstance to

10 happen by chance. It's very unusual that -- it's

11 very unlikely that you would achieve such a

12 performance purely by chance, and so there was a

13 strong suspicion that, to the extent that there

14 are rooms -- there is room for interpreting the

15 precise meaning of the SEC rules, that that

16 interpreted margin could be used to defer or  
17 accelerate bookings from one period into another  
18 and thereby achieve a greater degree of stability  
19 in the reserves additions process.

20 So part of the proposal that I was asked  
21 to come up with involved suggesting ways in which  
22 those areas of uncertainty could be exploited in  
23 terms of the way our reserves replacement  
24 performance appeared in external reports,  
25 basically to attempt to emulate the apparent  
0226

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 performance of some of our competitors.

3 Q In your discussions regarding Gorgon,  
4 did anyone ever say to you that the reserves could  
5 not be de-booked because it was "too big to  
6 swallow"; that is, the amount?

7 A That was an expression that was used by  
8 Mr. Frank Coopman at one point in time during the  
9 lead-up to the Rockford Project.

10 Q What did you understand Mr. Coopman to  
11 be referring to when he said that?

12 A That the size of the booking was such  
13 that a de-booking would have had a very large  
14 negative impact on the Reserves Replacement Ratio  
15 for a particular year, and that, as a consequence,  
16 there was an obvious degree of reluctance to make  
17 the de-booking if there were circumstances  
18 prevailing that would enable us to justify keeping  
19 the booking.

20 Q Who is Frank Coopman?

21 A He was the Chief Financial Officer of  
22 Exploration and Production.

23 MR. FERRARA: It's about 5:20.

24 MR. HABER: I've got a couple more  
25 questions about this, and then I think we'll be  
0227

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 done with this and we can call it an evening.

3 MR. FERRARA: Okay.

4 BY MR. HABER:

5 Q Do you recall anyone -- withdrawn. With  
6 regard to this discussion with Mr. Coopman, was

7 there any consideration given to the impact on the  
8 market that a de-booking in Gorgon would have?

9 MR. TUTTLE: Objection to form. Are you  
10 asking if Mr. Coopman mentioned that?

11 MR. HABER: Yes, if during the  
12 discussion -- and by "market" -- let me be  
13 clear -- I'm talking about the investing market.

14 THE WITNESS: No. I should clarify my  
15 previous answer by stating that Mr. Coopman made  
16 that remark in hindsight, not as any -- once the  
17 decision to de-book had already effectively been  
18 taken, there wasn't any active discussion along  
19 the lines you suggested, that I recall, during the  
20 period before we had decided to de-book the  
21 volume.

22 BY MR. HABER:

23 Q And during the period before the  
24 decision to de-book, was there any discussion,  
25 that you were present, concerning Gorgon being too  
0228

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 large a volume to de-book?

3 A No, not that I recall.

4 Q Do you recall discussions concerning in  
5 particular the effect a de-booking would have on  
6 the Reserves Replacement Ratio?

7 A I know that I brought to the attention  
8 of management, in one note or other that I wrote,  
9 what the effect of such a de-booking would be,  
10 40 percent RRR, negative. I don't recall any  
11 specific discussion as a consequence of that fact  
12 being made available. I think it's one that they  
13 could have worked out for themselves anyway. It  
14 would have been obvious to all.

15 Q One other question: With regard to the  
16 information that SDA was providing about how they  
17 would bring Gorgon to FID, did you do any  
18 investigation other than just receive the  
19 information from them?

20 A Beyond the receipt of this information  
21 and in particular the apparent endorsement of two  
22 MDs with the suggested course of action, no,  
23 nothing beyond that.

24 Q And was the note that's attached to  
25 Exhibit 4, is that the -- is that a place where  
0229

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 the information concerning a plan to bring Gorgon  
3 to FID could be found?

4 A Yes. It's Appendix 6, Page V00331088,  
5 which, now that I read it again, I find that I  
6 have misremembered. The FID they quoted is  
7 March 2004, so -- I believe I said earlier "during  
8 2003."

9 Q Now, did you ask anyone at SDA if SDA  
10 had received the appropriate regulatory approvals  
11 to begin construction on Barrow Island?

12 A No.

13 Q And at the time did anyone at SDA tell  
14 you if they were making any progress on obtaining  
15 executed sales contracts for the sale of the gas?

16 A Beyond specifying this plan and summary  
17 of the work activities, no.

18 Q Do you know if they had received any  
19 executed sales contracts at that time?

20 A I don't know if they had or not.

21 Q Had you ever seen an audit trail of the  
22 original Gorgon booking in 1997?

23 A No.

24 Q Is an audit trail something that you  
25 would have expected to be able to look at in your  
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1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 capacity as Group Reserves Coordinator?

3 A Well, I'm sorry. Can you clarify what  
4 you mean by "audit trail."

5 Q I guess what I mean is the documentation  
6 showing the reasons, the justification for the  
7 booking.

8 A Yes, it is some -- it is -- I would  
9 expect to see such documentational, such  
10 documentation to be producible by the operating  
11 units. In this case documentation was produced by  
12 an independent reserves consultant concerning the  
13 volumes, which actually suggested a higher volume  
14 of proved reserves than we had on the books, but



15 as regards the decision to put those reserves on  
16 the books, I asked for the audit trail, and none  
17 could be found.

18 Q And one last question: Who was this  
19 reserves consultant?

20 A Netherland & Sewell.

21 MR. HABER: I think this is a good place  
22 for us to stop for the day and resume tomorrow.

23 THE VIDEOGRAPHER: This marks the end of  
24 Volume I in the deposition of Mr. Pay. The total  
25 number of tapes used today is three. We are going

0231

1 JOHN RICHARD PAY, Volume I, January 22, 2007  
2 off the record. The time is 5:28 p.m.

3 (Signature having not been waived,  
4 Volume I of the video deposition of JOHN RICHARD  
5 PAY was concluded at 5:28 p.m.)

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1 JOHN RICHARD PAY, Volume I, January 22, 2007

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4 ACKNOWLEDGEMENT OF WITNESS

5

I acknowledge that I have read and examined the foregoing testimony, and the same is a true, correct and complete transcription of the testimony given by me, and any corrections appear on the attached Errata sheet signed by me.

(DATE) (SIGNATURE)

# ERRATA SHEET

IN RE: ROYAL DUTCH/SHELL SECURITIES LITIGATION

RETURN BY:

PAGE	LINE	CORRECTION AND REASON
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25 (DATE) (SIGNATURE)

0234

1 JOHN RICHARD PAY, Volume I, January 22, 2007

2 E R R A T A S H E E T

3 IN RE: ROYAL DUTCH/SHELL SECURITIES LITIGATION

4 RETURN BY:

5 PAGE LINE CORRECTION AND REASON

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25 (DATE) (SIGNATURE)

0235

1 JOHN RICHARD PAY, Volume I, January 22, 2007

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4 CERTIFICATE OF SHORTHAND REPORTER -- NOTARY PUBLIC

5 I, Laurie Bangart-Smith, Registered

Professional Reporter, the officer before whom the

6 foregoing deposition was taken, do hereby certify

that the foregoing transcript is a true and

7 correct record of the testimony given; that said

testimony was taken by me stenographically and

8 thereafter reduced to typewriting under my

supervision; and that I am neither counsel for,

9 related to, nor employed by any of the parties to

this case and have no interest, financial or

10 otherwise, in its outcome.

11 IN WITNESS WHEREOF, I have hereunto set  
my hand and affixed my notarial seal this 23rd day  
12 of January, 2007.

13  
14  
15 My commission expires: March 14th, 2011

16  
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18 \_\_\_\_\_  
19 LAURIE BANGART-SMITH  
NOTARY PUBLIC IN AND FOR  
20 THE DISTRICT OF COLUMBIA

21  
22  
23  
24  
25

0236

1 IN THE UNITED STATES DISTRICT COURT  
2 DISTRICT OF NEW JERSEY  
3 Civ. No. 04-3749 (JAP)  
4 (Consolidated Cases)  
5 Hon. Joel A. Pisano  
6

7 ----- +

8 IN RE ROYAL DUTCH/SHELL |  
9 TRANSPORT SECURITIES |  
10 LITIGATION |

11 ----- +

12  
13 Volume II  
14 Videotaped Deposition of John Richard Pay  
15 Washington, D.C.  
16 Tuesday, January 23rd, 2007  
17 10:14 a.m.  
18  
19  
20  
21  
22

23 Job No. 22-94049  
24 Pages 236 - 455, Volume II  
25 Reported by: Paula G. Satkin

0237

1 Videotaped Deposition of  
2 JOHN RICHARD PAY  
3

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0238

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1 EXAMINATION INDEX

2

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0243

1           JOHN RICHARD PAY  
2           P R O C E E D I N G S

3  
4           THE VIDEOGRAPHER: This marks the  
5 beginning of tape one, Volume II, in the  
6 deposition of John Pay in the matter of Royal  
7 Dutch Shell Transport Securities Litigation.

8           Today's date is January 23rd,  
9 2007. The time is 10:14 a.m.

10          I would like to remind the witness  
11 that he is still sworn in from yesterday.

12          You may begin.

13 Whereupon--

14          JOHN RICHARD PAY

15 a witness, called for examination, having  
16 previously been duly sworn, was examined and  
17 testified further as follows:

18  
19          EXAMINATION BY COUNSEL FOR  
20          THE LEAD PLAINTIFF -- RESUMED

21  
22 BY MR. HABER:

23          Q. Good morning, Mr. Pay.

24          A. Good morning.

25          Q. Before we get started, I just want

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1           JOHN RICHARD PAY

2 to remind you as well that if there's any  
3 question that you don't know the answer to,  
4 please let me know and, of course, if there's  
5 any questions that you don't understand, please

6 let me know and I'll be happy to rephrase and as  
7 we did yesterday try to make it clear so you do  
8 understand it.

9 A. Okay.

10 Q. Also a reminder that all answers  
11 have to be audible, as well, yes or noes, no  
12 head nods and uh-huhs and the like.

13 A. Okay.

14 Q. Great. And the other thing, of  
15 course, if you need a break let me know, except  
16 if there is a question pending and then we'll  
17 accommodate you after the answer.

18 A. Okay.

19 Q. Yesterday before we broke you had  
20 talked about a proposal for a reserves  
21 management process. Do you recall that?

22 A. Yes.

23 Q. Okay. I would like to show you  
24 some documents which I believe reflect that  
25 proposal.

0245

1 JOHN RICHARD PAY

2 (Pay Exhibit Number 5 was marked  
3 for identification.)

4 BY MR. HABER:

5 Q. Mr. Pay, I just ask you to take a  
6 look at this document while I identify it for  
7 the record.

8 We've just marked as Pay Exhibit 5  
9 is an e-mail with an attachment. The e-mail is  
10 from John Pay, it's dated September 23, 2002,  
11 and the recipient is also John Pay. The subject  
12 line is EP Reserve Management. The Bates number  
13 is PER 00100076 through PER 00100090.

14 Mr. Pay, does the attachment to  
15 this e-mail which reads note for discussion EP  
16 proved reserves management. Does this document  
17 reflect that proposal for a reserves management  
18 process that you talked about yesterday?

19 A. It's a draft of the proposal.

20 Q. Okay. Did you prepare this draft?

21 A. Yes.

22 Q. Did you have anyone assist you in

23 preparing the draft?

24 A. In preparing the draft that you  
25 see -- that we see here, I don't recall, but the  
0246

1 JOHN RICHARD PAY

2 cover note is it looks as though it's a message  
3 from me to me. There were several blind copies  
4 on that and I was seeking comments and input  
5 from various people around the group on the  
6 document.

7 Q. That's actually one of the  
8 questions I was going to ask you. Do you recall  
9 who the blind copy people were?

10 A. There were many. I think I  
11 explained yesterday that I had a network of  
12 contacts within the operating companies upon  
13 whom I relied for the submission of the reserves  
14 data and I recall that I selected several  
15 members of that group. I can't specifically  
16 recall all of their names.

17 Q. I take it just from the cover  
18 e-mail here Sarah Bell was one of the blind  
19 copied people?

20 A. It certainly would appear to be.

21 Q. Do you recall if Remco Aalbers was  
22 one of the blind copy recipients?

23 A. Yes, I believe he was.

24 Q. Do you recall if Rod Sidle was one  
25 of the blind copied recipients?  
0247

1 JOHN RICHARD PAY

2 A. I don't recall if he was.

3 Q. Do you recall if Jan-Willem Roosch  
4 was a blind copy recipient?

5 A. I don't recall if he was.  
6 However, he was not working for the company at  
7 that time and therefore I would be surprised if  
8 he was.

9 Q. At that point he had retired; is  
10 that correct?

11 A. Correct.

12 Q. Do you know if Mr. Roosch was  
13 doing any consulting work for the company?

14 A. At that time I don't believe he  
15 was.

16 Q. Did there come a time when he was  
17 that you're aware of?

18 A. Yes. He is presently engaged in a  
19 consultative role. I invited him to come back  
20 on a contract to help us with project Rockford  
21 at the end of 2003, early 2004.

22 Q. Why did you ask Mr. Roosch to  
23 assist you -- assist the team in project  
24 Rockford?

25 A. Because I needed assistance in  
0248

1 JOHN RICHARD PAY  
2 managing the data and compiling and working with  
3 the data and since I knew Mr. Roosch well and he  
4 had been involved in a previous exercise, as we  
5 discussed yesterday, it seemed an obvious thing  
6 to do.

7 Q. Now, before you circulated this  
8 draft did you show a copy of the draft to  
9 Mr. Brass?

10 A. I can't recall whether I did or  
11 not.

12 Q. Do you recall if you showed a copy  
13 of this draft to Mr. Nauta?

14 A. Again, I can't recall whether or  
15 not I did.

16 Q. And the same question with regard  
17 to Mr. Harper?

18 A. And the same answer.

19 Q. From your testimony yesterday,  
20 this proposal came out of conversations that you  
21 had with Mr. Brass; correct?

22 A. Mr. Brass had asked me to prepare  
23 a proposal, as we discussed yesterday, and this  
24 is in effect my first draft of my intended  
25 response to Mr. Brass.

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1 JOHN RICHARD PAY

2 Q. Do you recall providing Mr. Brass  
3 with a copy of the draft of this note? Not  
4 necessarily on September 23rd, but at any time?

5 A. My recollection is that a draft

6 was given to him.

7 Q. Okay. Do you recall if he  
8 provided any commentary or any suggestions?

9 A. No, I don't recall any specific  
10 commentary he might have given.

11 Q. Do you recall receiving any  
12 comments from any of the people who were blind  
13 copied on this e-mail?

14 A. Yes. There were several  
15 respondents to the message giving -- sorry, to  
16 the e-mail, giving comments on the proposals.  
17 That was the purpose I had asked, I sent the  
18 e-mail to them to seek their comments.

19 Q. And why did you select these  
20 people to send them a copy?

21 A. Well, they were colleagues working  
22 in the business of resource volume management  
23 including proved reserves and I would  
24 characterize it as a group of peers or  
25 co-workers whose opinions I valued and who

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1 JOHN RICHARD PAY  
2 ultimately would be involved in implementing  
3 this proposal if it would be accepted or  
4 approved. And therefore since they would be  
5 required to work with the proposal if it was  
6 accepted I was keen to understand what their  
7 views on it would be.

8 Q. Okay. If you look at the e-mail  
9 that you sent, which is the first page of this  
10 exhibit, and I'm looking at the bottom of the  
11 second paragraph, which is really the full one,  
12 it says, "please do not distribute the document  
13 further. Please delete it from your system when  
14 you have finished with it. I will send you a  
15 copy of the final version on request."

16 Why did you request that the  
17 recipients delete the draft note after they  
18 reviewed it?

19 A. I was simply keen that this early  
20 draft of the proposal did not -- was not  
21 retained on file in people's offices purely from



22 the fact that I anticipated there might be  
23 changes and I didn't want an early draft to be  
24 lying in people's cupboards or current document  
25 in people's offices. It was use not the final  
0251

1 JOHN RICHARD PAY

2 version. So as I clearly indicate here, I was  
3 more than happy to send a finalized version, but  
4 I didn't want early drafts to be preserved in  
5 case they be mistaken for the final draft.

6 Q. Is that something you had done  
7 customarily with draft notes that you circulated  
8 to people for comment?

9 A. Generally, no.

10 Q. So what set this draft note apart  
11 from the ordinary note that you would circulate?

12 A. The fact that it's introducing an  
13 or proposing a new procedure, which is replacing  
14 procedures in existence in the operating units.

15 Q. Now, in the next paragraph it  
16 says, "ExCom has requested a proposal for  
17 modifications to the way in which EP approved  
18 reserves (for external disclosure) should be  
19 managed." How did you come to know the ExCom  
20 had requested a proposal to modify these  
21 procedures?

22 A. Since Lorin Brass had asked me to  
23 prepare such a proposal.

24 Q. I notice here the sentence also  
25 has in the parenthetical for external  
0252

1 JOHN RICHARD PAY

2 disclosure. Was there a difference between  
3 internal reporting, if you will, and external  
4 disclosure?

5 A. No.

6 Q. Is there any reason why you put in  
7 the parenthetical for external disclosure?

8 A. Not that I recall.

9 Q. In your experience as the group  
10 reserves coordinator did Shell have two separate  
11 means of reporting proved reserves, one being  
12 internally, the other being externally?

13 A. No, they were one in the same

14 figure.

15 Q. If you look at the -- this  
16 paragraph further, the sentence that begins,  
17 however. It says, "however, it also proposes to  
18 introduce a higher level of management control  
19 of the final outcome which seems to be in line  
20 with the practices of our competitors and which  
21 have," I'm sorry, "and which would have  
22 implications for the way in which the year end  
23 reserves reporting is carried out." Do you see  
24 that?

25 A. I do.

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1 JOHN RICHARD PAY

2 Q. Okay. The -- part of the sentence  
3 that deals with the practices of Shell's  
4 competitors, how did you learn that the proposal  
5 seemed to be in line with their practices, their  
6 being competitors?

7 A. I explained yesterday the  
8 performance of Exxon which had drawn my  
9 attention and the attention of others in our  
10 company, their performance in reserves  
11 replacement was quite stable which would not be  
12 expected by chance. I had had a conversation  
13 with Rod Sidle who indicated to me a practice  
14 which he believed went on in Exxon whereby they  
15 had in layman's term a part of unbooked reserves  
16 which they used to add as required to manage  
17 their year end result.

18 Q. If you turn the page to page 80,  
19 that's 100080.

20 A. Yes.

21 Q. On the right hand column of the  
22 graphic under ExCom review it says, "float items  
23 the manage end result." Are you referring to  
24 what you just described is what you believed the  
25 practice in Exxon was?

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1 JOHN RICHARD PAY

2 MR. TUTTLE: Object to form.

3 BY MR. HABER:

4 Q. You can answer.

5 A. No, not specifically because we  
6 did not have a part of unbooked reserves that we  
7 could drawn upon.

8 Q. This was the proposal part?

9 A. Correct.

10 MR. TUTTLE: Objection,  
11 argumentative.

12 BY MR. HABER:

13 Q. So what else did you mean when you  
14 say float items to manage end result?

15 A. This is a shorthand summary  
16 notation of a process which I believe is  
17 explained more fully elsewhere in the document  
18 whereby it appeared to me and still appears  
19 today to be an entirely legitimate process in  
20 line with the sort of activities we discussed  
21 yesterday in terms of the 2002 road map. The  
22 compilation of a series of opportunities which  
23 may have an influence on reserves replacement  
24 performance.

25 An example would be a study or a  
0255

1 JOHN RICHARD PAY

2 field development plan that was planned to  
3 mature, reach technical and commercial maturity,  
4 for example, in the following year. If an  
5 opportunity were identified sufficiently early  
6 as to allow development works to be accelerated  
7 and conducted in a more focused fashion through  
8 the giving more resources to that project, for  
9 example. Then an opportunity may exist to bring  
10 that project to a level of maturity when it  
11 reaches project sanction or whatever the  
12 required level would be in order to book the  
13 reserves in an earlier reporting period than the  
14 one that was planned in the business plan.

15 Q. I guess what I'm a little unclear,  
16 I don't understand what is meant by float items  
17 to manage end results. Can you explain that?

18 MR. TUTTLE: Objection, asked and  
19 answered. Same objection.

20 THE WITNESS: It's a description

21 of items such as those I just mentioned where  
22 management may determine the traditional  
23 resources may be prioritized onto one project  
24 onto another in order to achieve the result that  
25 I mentioned.

0256

1 JOHN RICHARD PAY

2 BY MR. HABER:

3 Q. Were there other examples that you  
4 had in mind when you made this proposal than  
5 just accelerating projects that could be  
6 projected sanctioned?

7 A. Not specifically.

8 Q. Would it -- at the time you wrote  
9 this did it also include the scenario of having  
10 reserves that would be deferred from booking  
11 sort of as we talked about yesterday in a wait  
12 and see manner, would that also be included in  
13 what you meant here to float items to manage end  
14 result?

15 MR. TUTTLE: Objection to the  
16 characterization of prior testimony. You can  
17 answer.

18 BY MR. HABER:

19 Q. You can answer.

20 A. It may do under certain  
21 circumstances, but the primary objective here  
22 was to seek management endorsement of  
23 reprioritizing of work within the company.

24 Q. Okay. If you turn back to the  
25 first page. The latter part of that sentence

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1 JOHN RICHARD PAY

2 that I read into the record, the one that  
3 begins, however, which says, "and which would  
4 have implications for the way in which the year  
5 end reserves reporting is carried out." What  
6 did you mean by that?

7 A. I'm referring to the -- again, the  
8 greater detail in the process which is  
9 documented here whereby decisions regarding, for  
10 example, project sanction would be phased in or  
11 out of the reporting period depending on the

12 decisions that had been taken earlier in the  
13 year to prioritize resources, yes or no, so  
14 there would be a requirement to review the  
15 status of the projects concerned at the end of  
16 the year.

17 Q. Uh-huh. Okay. If you can turn  
18 the page to Appendix B, which is on page 86 of  
19 the document. It's not actually 86, but the  
20 Bates stamp number 86 is clear.

21 A. Yes.

22 Q. The appendix at the top reads,  
23 "Appendix B: Potential Reserves Exposure  
24 Catalog."

25 Is this the catalog that we were  
0258

1 JOHN RICHARD PAY

2 talking about yesterday?

3 A. Yes. Sorry. It is a version of  
4 it. There were several drafts.

5 Q. That was my next question. My  
6 next question was, was there a formal version of  
7 this catalog that preceded September of 2002,  
8 that is a final one that had not been updated?

9 A. The catalog was not -- was  
10 intended to be reviewed and updated  
11 periodically. The first draft of it was dated  
12 before September 2002. I believe the first  
13 draft was prepared in July 2002 and it was  
14 updated periodically.

15 Q. Now, how often was the exposure  
16 list intended to be updated?

17 A. I believe as is proposed in this  
18 document there would be twice yearly, it was  
19 proposed there would be twice yearly updates and  
20 reviews of that catalog.

21 Q. Independent of this document, what  
22 was the intention with regard to updating the  
23 catalog?

24 MR. TUTTLE: Objection to form.

25 MR. HABER: Just so the record is

0259

1 JOHN RICHARD PAY

2 clear, because I don't want -- I would like

3 counsel to understand where I got this from.

4 The answer was, as is proposed in the document.

5 And I just want to know, was there anything

6 other than what's reflected in the document

7 where you had intended on a certain period in

8 time to update this catalog.

9 My question is focused outside of

10 the document. Let me rephrase it.

11 THE WITNESS: Could you repeat the  
12 question.

13 BY MR. HABER:

14 Q. With that clarification, all I  
15 want to know is other than what's reflected in  
16 the document did you have an intention to update  
17 the catalog more than twice a year?

18 A. No.

19 Q. And within the year what time  
20 frame did you intend to do the update to the  
21 catalog?

22 A. I proposed that it should be  
23 updated and presented to management at the end  
24 of each year and halfway through each year.

25 Q. When you say the end of the year,

0260

1 JOHN RICHARD PAY  
2 is that the end of the calendar year -- excuse  
3 me -- or at the end of the ARPR process?

4 A. My intention was in December and  
5 in June or July.

6 Q. Okay.

7 (Pay Exhibit Number 6 was marked  
8 for identification.)

9 BY MR. HABER:

10 Q. Let me show you what's been marked  
11 as Pay Exhibit 6. While the witness is looking  
12 at the document, let me identify it for the  
13 record.

14 Pay Exhibit 6 is a note for  
15 discussion that says EP reserves outlook. It's  
16 dated in the upper right-hand corner July 22,  
17 2003. It's Bates number is V 00010736 through V  
18 00010745.

19 A. If I may comment, the pages in the

20 exhibit are not in the correct order, but the  
21 document otherwise seems to be complete.

22 Q. Okay. I can only tell you this is  
23 how the document was produced to us.

24 A. Okay.

25 Q. Other than the fact that the pages  
0261

1 JOHN RICHARD PAY

2 don't seem to be in the correct order, but the  
3 content otherwise seems complete, I take it then  
4 you have seen this document before today?

5 A. Yes.

6 Q. Did you prepare this document?

7 A. Yes.

8 Q. Did you have anyone assisting you  
9 in its preparation?

10 A. Not that I recall.

11 Q. I think yesterday you had  
12 testified that with regard to your job you only  
13 had one assistant; is that correct?

14 A. Yes. One full-time assistant and  
15 actually one part-time assistant who helped with  
16 software issues from time to time.

17 Q. So when you were preparing these  
18 notes, I take it then it was just you and your  
19 assistants who were doing the preparation?

20 MR. TUTTLE: Objection to form.

21 BY MR. HABER:

22 Q. You can answer.

23 A. In terms of the detailed staff  
24 work, yes.

25 Q. In terms of content of these  
0262

1 JOHN RICHARD PAY

2 notes, who, if anyone, assisted you in preparing  
3 these notes?

4 A. Can you clarify what you mean by  
5 assisted me?

6 Q. Provided you with data or other  
7 information that enabled you to draft the note?

8 A. I mentioned on several occasions  
9 my focal points in the operating units who  
10 assisted me to the extent of providing data to



11 me regularly through the year, both at the end  
12 of the year in terms of compiling the end of  
13 year report, but also we had a monthly reporting  
14 system where we invited the operating units to  
15 provide information on changes to that plan in  
16 terms of what they expected the end of the year  
17 position to be. So there was a monthly data  
18 gathering process which we called the latest  
19 estimate, it applied to things, not only  
20 reserves, that was a small part of it, capital  
21 expenditure production forecasts, similar key  
22 business performances were updated regularly in  
23 terms of the latest estimate of performance for  
24 the year.

25 Q. Who were the focal points, what  
0263

1 JOHN RICHARD PAY  
2 was the job position that you're referring to?  
3 A. These were typically depending on  
4 the size of the operating unit that would either  
5 be a full-time position within the operating  
6 unit. For the larger ones, persons whose  
7 specific task within the operating unit was to  
8 manage the hydrocarbon reporting, volume  
9 reporting process for their operating unit.  
10 Sarah Bell, who we had been discussing, is an  
11 example of such a person working in Australia  
12 and each of the operating units had similar  
13 focal points.

14 Q. Did you have an understanding of  
15 the staffing of the reserves coordinator  
16 position in competitors such as say Exxon?

17 MR. TUTTLE: Objection,  
18 foundation.

19 THE WITNESS: At what time?  
20 BY MR. HABER:

21 Q. During your tenure as group  
22 reserves coordinator?

23 A. Initially, no. I came to learn  
24 during the period probably in late 2003 that  
25 indeed Exxon had a central staff comprising some

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1 JOHN RICHARD PAY

2 13 people working on the issue.

3 Q. And how did you come to learn  
4 that?

5 A. This was information given to me  
6 by Rod Sidle.

7 Q. Did Mr. Sidle say how he obtained  
8 that information?

9 A. I believe through informal  
10 contacts he had with colleagues in other  
11 companies.

12 Q. Were there any other competitor  
13 companies that you had learned how the position  
14 was being staffed?

15 A. During the course of my tenure at  
16 the job, the reserves coordinator job, I again  
17 established informal professional links with my  
18 counterpart in BP and Total, whilst I did not  
19 ask them the question directly of how they were  
20 resourced. During the course of my conversation  
21 with them I formed the opinion that they  
22 similarly, were resourced similarly to Shell.

23 Q. To Shell and not Exxon?

24 A. To Shell.

25 Q. Okay. So that would be one person

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1 JOHN RICHARD PAY

2 with an assistant or two?

3 A. One person charged with compiling  
4 the figures centrally, obviously relying on  
5 networks of people around the world.

6 Q. While we're on the note, the July  
7 note, let's talk about that and we'll come back  
8 to the other note.

9 On the first page it appears to  
10 have a signature from Walter van der Vijver and  
11 it also in the upper right-hand corner indicates  
12 it was sponsored by Mr. Van der Vijver. Do you  
13 have an understanding as to why Mr. Van der  
14 Vijver would be sponsoring the note?

15 MR. TUTTLE: Objection,  
16 foundation. You can answer to the extent you  
17 know.

18 THE WITNESS: Well, I don't know

19 specifically.

20 BY MR. HABER:

21 Q. Was it your understanding at the  
22 time that all notes that were presented to the  
23 ExCom had to be sponsored by a member of the  
24 ExCom?

25 MR. TUTTLE: Objection,

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1 JOHN RICHARD PAY

2 foundation.

3 THE WITNESS: I had no opinion  
4 either way.

5 Q. When you drafted the note did you  
6 circulate the note to anyone for their review  
7 and comment?

8 THE WITNESS: I can't recall  
9 specifically doing so. However, I think it is  
10 very unlikely that I would have given it  
11 directly to Mr. Van der Vijver without seeking  
12 comments from my supervisors.

13 BY MR. HABER:

14 Q. Do you recall receiving any  
15 comments from Mr. Van der Vijver about the note?

16 A. I don't recall, no.

17 Q. Do you recall having any  
18 discussions with Mr. Van der Vijver about the  
19 content of the note?

20 A. This specific note?

21 Q. Yes. Again so the record is  
22 clear, we're talking about Pay Exhibit 6.

23 A. Yes.

24 MR. TUTTLE: Are you asking about  
25 the specific text in the note or just

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2 conversations generally on the information  
3 presented.

4 MR. HABER: Conversations about  
5 the content in the note.

6 MR. TUTTLE: I just want to make  
7 sure he understands without regard to whether it  
8 was about the text in the note itself.

9 MR. HABER: Correct.

10 MR. TUTTLE: Okay.

11 THE WITNESS: Honestly, I can't

12 recall whether or not there were specific

13 discussions. You know, I spoke to Mr. Van der

14 Vijver about reserves at several times. Whether

15 there was any specific discussion on exactly

16 this note, I can't remember.

17 BY MR. HABER:

18 Q. If you take a look at the Bates

19 page 10738.

20 A. Yes.

21 Q. There's a discussion of the latest

22 estimate of the RRR. Do you see that?

23 A. Yes.

24 Q. Do you recall having discussions

25 with Mr. Van der Vijver about the RRR, the

1 JOHN RICHARD PAY

2 latest estimate for the RRR?

3 A. Well, specifically at this time?

4 Q. Yes.

5 A. Really, I can't remember.

6 Q. Do you recall discussing

7 a percent, a RRR percent of 72, which is

8 reflected in this document as the organic RRR?

9 A. I'm going to repeat my prior

10 answer. I can't remember any specific

11 discussion in relation to this note.

12 Q. Okay. Just so the record is

13 clear, when you're referring to specific

14 discussion, are you referring to a discussion

15 with your supervisors?

16 MR. TUTTLE: I think you asked

17 about Mr. Van der Vijver.

18 MR. HABER: Well, okay. Fair

19 enough.

20 BY MR. HABER:

21 Q. You're referring now to Mr. Van

22 der Vijver; is that correct?

23 A. Yes.

24 Q. Do you recall generally discussing

25 the RRR and the percent that's reflected in this

1 JOHN RICHARD PAY

2 document with Mr. Van der Vijver?

3 A. I'm sorry, is that not the same  
4 question?

5 Q. You said specifically. I want to  
6 know if you had any general discussions with  
7 him?

8 A. I'm struggling to understand what  
9 you're driving at with your question. I think  
10 you're asking me can I remember a meeting at  
11 which I sat down and discussed this document or  
12 its content with him, to which my answer is no,  
13 I can't remember any such meeting taking place.

14 Q. And the question was broadened to  
15 be other than within this document, do you  
16 recall having a meeting or discussion with  
17 Mr. Van der Vijver about the RRR?

18 MR. TUTTLE: But, again, so the  
19 record is clear, the RRR being the 72 percent  
20 organic reserve replacement ratio reflected in  
21 the document.

22 MR. HABER: No.

23 MR. TUTTLE: Now you want  
24 generally any discussion about reserve  
25 replacement.

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2 MR. HABER: In or about this time  
3 period, yes.

4 THE WITNESS: Since a key part of  
5 my job was to keep management including Mr. Van  
6 der Vijver apprised of the outlook or the latest  
7 estimate for reserves replacement for the  
8 reporting year, yes, I had discussions with  
9 Mr. Van der Vijver and other members of the  
10 management team and made presentations to them  
11 as to what the latest estimate was.

12 BY MR. HABER:

13 Q. Now, do you recall having such  
14 discussions with regard to the latest estimate  
15 for the time period in which this note was  
16 drafted, so that would be roughly in July 2003?

17 A. Evidently, since I submitted a

18 note or prepared a note on behalf of Mr. Van der  
19 Vijver, the giving of this note to him  
20 represented the passing of information. I don't  
21 recall specifically sitting down and discussing  
22 it with him.

23 Q. Okay. Now, how often were latest  
24 estimates provided to the ExCom with regard to  
25 the reserves replacement ratio?

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2 A. My proposal in the previous  
3 Exhibit 5 that we were discussing was to have a  
4 formal review in July of each year of which this  
5 was the first example. There were other  
6 occasions when on an ad hoc basis I was asked to  
7 provide information.

8 Q. So during your tenure -- I'm just  
9 trying to understand what the process was for  
10 providing the latest estimate on the RRR to the  
11 ExCom was during your tenure as GRC?

12 A. I would like to draw a distinction  
13 between information provided in notes such as  
14 this which are somewhat analytical in nature as  
15 opposed to purely numerical information which I  
16 understand was updated monthly or quarterly as  
17 part of the latest estimate process that I  
18 summarized earlier, including other factors such  
19 as capital expenditure estimates, production  
20 forecasts and so forth. A summary of that  
21 information I believe was provided monthly, but  
22 purely numerical, just numbers, which is  
23 distinct from a more analytical type of  
24 presentation such as we see here in Exhibit 6.

25 Q. Was the less analytical

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1 JOHN RICHARD PAY

2 information provided to the ExCom on a monthly  
3 basis; do you know?

4 A. My understanding is that it was.

5 Q. And who provided that information  
6 to the ExCom?

7 A. This was a routine task performed  
8 by the Central Finance Group in Expiration

9 Production in The Hague.

10 Q. Who was head of the Central

11 Finance Group for EP?

12 A. Well, the chief financial officer  
13 who is Mr. Frank Coopman and obviously he had a  
14 staff working for him preparing those figures.

15 Q. Do you know within his reporting  
16 line who it was who actually provided those  
17 figures?

18 A. I believe Russell O'Brien was the  
19 head of the section that prepared those figures  
20 and he had a staff of 10, 20 people working for  
21 him.

22 Q. Do you recall what the section was  
23 that he was the head of?

24 A. I don't recall it by name, but it  
25 was the section that dealt with all internal and  
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2 external quarterly reports, annual reports and  
3 so forth.

4 Q. Now, with regard to the more  
5 analytical report such as this note, how  
6 frequently were these provided to the ExCom?  
7 I'm not talking about your proposal now, I'm  
8 talking within the time frame as your tenure as  
9 the group reserves coordinator.

10 MR. TUTTLE: Objection to  
11 foundation just on the reference as this note  
12 being to ExCom. You can answer otherwise.

13 THE WITNESS: I prepared notes  
14 similar to this probably three or four times  
15 during my tenure.

16 BY MR. HABER:

17 Q. When you say three or four times,  
18 do you mean throughout the entire tenure or per  
19 year?

20 A. Throughout the entire tenure.

21 Q. With regard to Pay Exhibit 6, do  
22 you know if this note was given to the ExCom?

23 A. No.

24 Q. You have no recollection that the  
25 note was actually given to the ExCom for an



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1 JOHN RICHARD PAY

2 ExCom meeting?

3 A. No.

4 Q. Okay. If you can turn the page to  
5 10739. If you look at the first bullet point it  
6 says, "the business faces a severe continuing  
7 challenge to meet the target of 100 percent  
8 organic RRR in 2003, especially when the effect  
9 of the Sakhalin 45 percent minority interest is  
10 excluded." Could you explain what you meant by  
11 this?

12 A. The severe continuing challenge is  
13 in reference to information received from the  
14 operating units as part of the business plan and  
15 the latest estimate process that I've previously  
16 referred to which indicated that the likely  
17 volume of proved reserves additions during the  
18 year 2003 was unlikely to equal the volume of  
19 production and therefore the reserves  
20 replacement ratio would fall short of the  
21 100 percent target.

22 Q. And what about the reference to  
23 Sakhalin minority interest?

24 A. The Sakhalin project is an or was  
25 at the time a project in which Shell held I

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1 JOHN RICHARD PAY

2 believe a 55 percent interest and under the  
3 rules of financial reporting as I understand  
4 them the majority shareholding that Shell had in  
5 that venture required that capital expenditure  
6 and all other financial parameters be reported  
7 on a 100 percent basis. This meant -- this also  
8 applied to reserves reporting so that had we  
9 disclosed proved reserves for Sakhalin we would  
10 have been required to specify 100 percent of the  
11 reserves applicable to that project of which our  
12 share, of course, was only 55 percent.  
13 Therefore, in our external tabulations of proved  
14 reserves there would be recognition of  
15 100 percent of the reserves, which did not match  
16 with our equity. Now, under the reporting

17 requirements of the SEC and FASB the  
18 contribution of any minority interest to the  
19 figures tabulated had to be summarized in the  
20 table, as well, but my observation of the way in  
21 which analysts in -- business analysts external  
22 to the company used the data from the annual  
23 reports was that minority interest contributions  
24 were not always deducted from the total in the  
25 way that they analyzed the data.

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2 I was aware of this and felt that

3 in disclosing figures for Sakhalin, which is a  
4 very large project and therefore the reserves  
5 contribution would be very large, we should be  
6 very clear in specifying the 45 percent minority  
7 interest was included in the figures so as not  
8 to -- so to ensure the correct equity reserves  
9 position was presented to investors.

10 Q. Do you recall the effect of  
11 excluding the Sakhalin interest had on the RRR?

12 A. I would have to remind myself of  
13 the figure.

14 Q. I believe it's reflected in this  
15 document, but you can refresh your recollection.

16 A. 22 percent it says here on page  
17 ending 738.

18 Q. So if that interest were to be  
19 excluded from the RRR it would reduce the RRR by  
20 22 percent; is that correct?

21 A. Yes. And the context in which I'm  
22 mentioning it here is that I was advocating that  
23 that contribution should be made very clear in  
24 our external statements.

25 Q. Where is the Sakhalin project?

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2 A. It's on Sakhalin Island which is  
3 part of the Russian Federation, on the eastern  
4 seaboard of the country.

5 Q. At this time had the project  
6 reached FID?

7 A. I can't recall whether at this

8 time it had.

9 Q. If we stay on page 10740 for a  
10 moment underneath the graph, that paragraph  
11 talks about the outlook?

12 A. Uh-huh. Yes.

13 Q. It reads, "the outlook is  
14 fundamentally unchanged from the 2002 business  
15 plan with 2004 remaining very weak."

16 Do you recall the basis upon which  
17 you wrote that?

18 A. I mentioned previously that part  
19 of my role was to collect data information from  
20 the operating units on their forecast of when  
21 proved reserves additions would be made, this is  
22 part of the business planning process. What  
23 you're looking at on this page is the colation  
24 of that information from the operating units and  
25 my summarizing of it for the information of

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1 JOHN RICHARD PAY  
2 management, so the source of the data is the  
3 business plan submitted by the operating units.

4 Q. If you look at the next sentence  
5 it says, "whilst in principle it appears  
6 possible to achieve 100 percent plus RRR in the  
7 later planned period years, many of the gains  
8 rely on delivery of planned elements that at  
9 this stage were only notionally defined." And  
10 then in the parenthetical, "including a large  
11 contribution from reserves that have yet to be  
12 discovered."

13 What did you mean by plan elements  
14 and in particular the later part of that  
15 sentence that says are only notionally defined?

16 A. In submitting the information on  
17 future proved reserves additions forecasts the  
18 operating units for each project, regardless of  
19 its state of maturity as of the date of  
20 submission of the data, would provide  
21 information on their forward plan for maturing  
22 those volumes for progressing them towards FID.  
23 And as is indicated here, even for exploration  
24 projects, for example, an exploration while

25 drilling in 2003, as part of that project

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2 information would be provided on the subsequent  
3 project development activity plan that would  
4 following from successful exploration. Bearing  
5 in mind this is only forecast data, the last  
6 part of the paragraph in parenthesis, for  
7 example, includes in later years the operating  
8 units projections of how proved reserves  
9 additions would be made assuming a development  
10 project would follow from exploration activities  
11 conducted in the short-term.

12 Q. If I understand the answer then,  
13 these are projects for which there is no field  
14 development plan in place; is that correct?

15 A. Yes and this information is  
16 reflecting the natural consequence in terms of  
17 proved additions of continuing to work those  
18 projects to define the development plan, submit  
19 and have sanctioned development plan and then  
20 proceed to execute it.

21 Q. Okay. I just want to go back to  
22 the prior page which is 10739. The bottom  
23 bullet point there's a reference to T&OE?

24 A. Yes.

25 Q. What is the T&OE?

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1 JOHN RICHARD PAY

2 A. That's an abbreviation standing  
3 for technical and operational excellence.

4 Q. Do you know what the function of  
5 the T&OE was at the time?

6 A. This was an organization that was  
7 introduced in the central office in The Hague  
8 comprising I believe some 20 or so experts in  
9 various aspects of field development and  
10 operations. I was not involved -- I was not a  
11 part of that organization. However, my  
12 understanding of the purpose of this  
13 organization as I perceived it was to ensure  
14 that oil field operational practices around the  
15 group were harmonized and that best practices,

16 to provide a conduit, this central community  
17 would provide a conduit for good practices,  
18 practices that had been found to benefit one  
19 operations in one company would easily  
20 disseminated to the rest of the group companies  
21 so that all might benefit from it.

22 Q. Do you know who the head of the  
23 T&OE was at this time?

24 A. No, I don't know who was the head  
25 of T&OE at that time.

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2 Q. Does the name John Bell refresh  
3 your recollection as the head of the T&OE?

4 A. I didn't know that he was -- if  
5 you're telling me that he was, I'm not sure I  
6 knew that.

7 Q. Okay. Do you know whose  
8 initiative it was to create the T&OE?

9 A. No.

10 Q. As the group reserves coordinator  
11 did you work with any member of the T&OE?

12 A. Yes. I had part of the portfolio  
13 of activities that the T&OE group were involved  
14 with was excellence in field development  
15 planning and I worked with Ian Percival who was  
16 in charge -- I believe was in charge of that  
17 particular part of the T&OE organization, I  
18 can't remember his full name but Min Cheong,  
19 M-I-N, C-H-E-O-N-G, who was also working in that  
20 section of T&OE.

21 Q. Your working relationship with  
22 Mr. Percival and Cheong, was that in connection  
23 with the business planning part of your job?

24 A. The nature of my interaction with  
25 those people and with T&OE was to again provide

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2 data to assist them in their role on the  
3 projected performance of the business, not only  
4 in terms of proved reserves additions, but  
5 actually primarily in terms of maturing scope  
6 for recoveries through the various less mature

7 categories. Their area of focus was primarily  
8 on the less mature elements of our hydrocarbon  
9 volume portfolio and understanding ways in which  
10 our performance in maturing those volumes could  
11 be improved through the application of best  
12 practice procedures.

13 Q. Did you know where Mr. Percival  
14 had worked within Shell prior to the T&OE?

15 A. He was my development manager when  
16 I was working in Brunei. I know that he was  
17 involved in the exploration department at the  
18 same time I with use working in The Hague  
19 earlier in the early '90s. Beyond that, I don't  
20 know his full career history.

21 Q. Have you ever heard of an  
22 organization by the name of SEPTAR?

23 A. I didn't know he worked for  
24 SEPTAR.

25 Q. Have you ever heard of the service  
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1 JOHN RICHARD PAY  
2 organization SEPTAR?

3 A. I've heard it only by name.

4 Q. Okay. Did you ever work with  
5 anyone affiliated with SEPTAR, again, during  
6 your tenure?

7 MR. TUTTLE: Affiliated while you  
8 were working with them, not asking you to guess  
9 whether someone had worked.

10 MR. HABER: Right.

11 THE WITNESS: What do you mean by  
12 affiliated with?

13 BY MR. HABER:

14 Q. Who was working for SEPTAR?

15 A. And if by working with you mean  
16 conducting specific pieces of work, studies,  
17 analyses, no, I don't recall.

18 Q. Okay.

19 A. Working in-depth with anyone from  
20 SEPTAR.

21 Q. Okay. If you can turn the page,  
22 still on Exhibit 6, page 10743.

23 A. Uh-huh.

24 Q. And also take a look at the next  
25 two pages, 44 and 45. Appendix C appears to be  
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1 JOHN RICHARD PAY

2 the exposure catalog that we've been talking  
3 about; is that correct?

4 A. No. I think its correct name is  
5 potential reserve exposure catalog.

6 Q. This is the catalog we've been  
7 talking about; correct?

8 A. Correct.

9 Q. Now, do you know if this updated  
10 catalog was sent to the ExCom?

11 A. At this time, no, I don't.

12 Q. Do you know if Mr. Van der Vijver  
13 had received this updated catalog?

14 A. Evidently he had since he signed a  
15 cover letter in which it was contained.

16 Q. Okay. At or about this time being  
17 July of 2003 do you recall having any  
18 discussions with Mr. Van der Vijver about the  
19 items on the catalog?

20 A. No. I've already answered a  
21 previous question. I don't recall any specific  
22 discussion around the content of this note.

23 Q. If you could just now look at 743.  
24 The second sentence under the title Potential  
25 Reserves Exposure Catalog.

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2 A. Uh-huh.

3 Q. Reads, "of the groups  
4 19350 million BOE proved reserves some  
5 1040 million (5 percent) is currently considered  
6 to be potentially at risk."

7 By potentially at risk, what did  
8 you mean?

9 A. This catalog was prepared, I think  
10 as we've discussed previously, it originated  
11 from the conversation that I had with Mr. Roosch  
12 when I took over the job and by potentially at  
13 risk, primarily we mean or I intended to mean  
14 reserves that are on the books that did not



15 necessarily fully comply with the internal  
16 guidelines that we had as of that date. We  
17 spent some time discussing this yesterday. Such  
18 that by when judged against the existing  
19 guidelines, bearing in mind the guidelines had  
20 changed over time, the reserves bookings here  
21 would not necessarily have been in compliance.  
22 Therefore, at risk primarily means at risk in  
23 relation to our own internal reserves reporting  
24 guidelines.

25 Q. And the consequence of this risk

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1 JOHN RICHARD PAY  
2 would be a potential debooking; is that correct?

3 MR. TUTTLE: Objection to form.

4 BY MR. HABER:

5 Q. You can answer.

6 A. At risk -- the approach we took  
7 was, which we considered to be reasonable at the  
8 time, was that where there existed a plan for  
9 those reserves to become compliant within a  
10 reasonably short period of time, typically two  
11 reporting years, it was reasonable to maintain  
12 those reserves on the books.

13 BY MR. HABER:

14 Q. And, again, the flip side of that  
15 is that they were subject to possible debooking;  
16 correct?

17 MR. TUTTLE: Objection to form.

18 BY MR. HABER:

19 Q. You can answer.

20 A. The intention was should we --  
21 should there be further, because the SEC was  
22 issuing guidance, March 2001, they were issuing  
23 guidance. At this time they were also seeking  
24 information on proved reserves attribution  
25 practices. There was an environment in which it

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1 JOHN RICHARD PAY  
2 was felt that the SEC was continually updating  
3 and if you like, tightening the criteria by  
4 which its reserves should be applied, its rules  
5 should be applied. And if that trend should

6 continue then, yes, there would be the  
7 possibility that some of these bookings would be  
8 called into question.

9 Q. I guess all I'm trying to find out  
10 is once they're called into question and there's  
11 a determination that there is no plan within a  
12 reasonable time to bring them within compliance,  
13 do those reserves then have to be debooked?

14 A. Yes.

15 Q. Okay.

16 A. And indeed they were, in some  
17 cases.

18 Q. Now, on page 10743, there is a  
19 reference to a divestment of the field KMOC.  
20 What is KMOC?

21 A. KMOC is not a field, it's a  
22 company, an entity that was acquired during 2002  
23 as part of the acquisition Enterprise Oil. This  
24 was a company in which at the time I believe --  
25 well, Enterprise had a shareholding and was  
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1 JOHN RICHARD PAY  
2 therefore an associate company of Enterprise --  
3 I'm struggling now to remember precisely what  
4 the abbreviation stands for. I believe it's  
5 something for Khanty Minsk Oil Company, it's a  
6 Russian based company.

7 Q. Were you involved in the due  
8 diligence of the Enterprise acquisition?

9 A. No.

10 Q. Were you asked to provide any  
11 analyses of the assets that were being acquired  
12 by Shell?

13 A. Prior to their acquisition?

14 Q. Yes.

15 A. No.

16 Q. And same question with regard to  
17 the work in connection with the acquisition,  
18 that is the period of time when the decision was  
19 made to make the acquisition, again, it would  
20 be -- I guess the best way to describe it would  
21 be the due diligence period?

22 A. Prior to the acquisition, no.

23 Q. Subsequent to the acquisition were

24 you asked to review the assets?

25 A. No, I was not asked to review the

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1 JOHN RICHARD PAY

2 assets. However, since it was the acquisition  
3 of a company and that company had filed reserves  
4 under form 20F I took it upon myself to visit  
5 the Enterprise office in London to learn more  
6 for myself about the specific aspects of the  
7 reserves that we had acquired.

8 Q. When did you visit the office in  
9 London?

10 A. It was very shortly after I  
11 joined -- took up the position of group reserves  
12 coordinator. I think it was probably in June or  
13 July of 2002.

14 Q. Did anyone accompany you?

15 A. No.

16 Q. Was there a purpose for your  
17 visit?

18 A. To understand the reserves and  
19 hydrocarbon resource volume inventory that we  
20 had acquired.

21 Q. During your visit did you find  
22 that there were -- that there was inventory that  
23 was not compliant with Shell's guidelines?

24 A. Yes.

25 Q. And can you explain that a little

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1 JOHN RICHARD PAY

2 bit further, please.

3 A. I found examples of reserves  
4 having been booked by Enterprise Oil in  
5 circumstances that in answer to the question,  
6 yes, were not in compliance with our own  
7 internal guidelines in several areas.

8 Q. Do you recall any of the assets or  
9 fields that were not compliant with Shell's  
10 guidelines?

11 A. Those that are listed on the  
12 following page, 744. There are two identified  
13 as being Enterprise acquisitions. One is the

14 Tempa Rossa field in Italy, the other is the  
15 KMOC asset that was the subject of your previous  
16 question.

17 Q. Do you know if the reserves that  
18 were from the Tempa Rossa field, if those  
19 reserves were restated as part of the  
20 recategorization?

21 A. No, I don't. However, I would say  
22 prior to the acquisition, of course, they were  
23 not on Shell's annual report in any case, so it  
24 would surprise me if any restatement were  
25 necessary.

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2 Q. Were they on Shell's annual report  
3 in 2003?

4 A. Not -- they were, but not in the  
5 same volume as Enterprise had reported.

6 Q. So there was still a volume that  
7 was reported that reflected reserves from the  
8 Tempa Rossa project?

9 A. In relation to one part of the  
10 project whereas I believe Enterprise had booked  
11 reserves for future projects, as well.

12 Q. So the answer is yes, there was a  
13 portion of the project?

14 A. A portion, yes.

15 MR. TUTTLE: Can I ask a question?  
16 Did Enterprise have a reserve certification?

17 THE WITNESS: Not to my knowledge.  
18 BY MR. HABER:

19 Q. If you look at page 745. After  
20 the discussion of Nigeria SPDC there's a  
21 discussion of PSC entitlement?

22 A. Yes.

23 Q. What does that refer to?

24 A. PSC stands for production sharing  
25 contract. This is a form of petroleum licensing

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1 JOHN RICHARD PAY

2 or contracting in which companies such as Shell  
3 participate in development projects and  
4 generally receive compensation for that

5 participation in the form of a cost recovery  
6 revenue stream and a profit revenue stream.  
7 This is distinct from the type of arrangement  
8 which is common in the US, for example, where  
9 the companies take an equity stake and share in  
10 both costs and revenues in proportion to their  
11 equity.

12 Q. What is the significance of the  
13 reference price?

14 A. The amount of cost and profits,  
15 oil or gas that Shell would be entitled to since  
16 it is essentially a financial compensation, cost  
17 and profit, it is conventional to translate that  
18 financial compensation into a volume, an  
19 equivalent volume of oil entitlement.

20 So for any given amount of  
21 financial compensation, depending on the oil  
22 price, the number of barrels that that would  
23 translate into will vary. If the oil price is  
24 high the number of barrels required to achieve  
25 the financial compensation would be low. If the

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1 JOHN RICHARD PAY  
2 oil price is low the number of barrels required  
3 would be high.

4 Shell's internal policy at that  
5 time was to calculate the entitlement based on  
6 its business planning reference oil price which  
7 at this time was \$16 per barrel.

8 Q. Now, this price, the \$16 a barrel,  
9 did this have an impact on any of the key  
10 performance indicators that Shell followed such  
11 as ROACE, return on average capital employed?

12 A. I'm not qualified to answer that  
13 question, I don't know.

14 Q. Do you know what a mid project  
15 screening value is?

16 A. In evaluating our forward business  
17 plans, a range of different oil price and  
18 related product prices, gas, L&G, et cetera, a  
19 range of pricing scenarios is used for  
20 evaluating projects and business performance  
21 going forward. There is a low price, the high

22 price and the one you referred to is the middle  
23 price.

24 Q. Now, is this mid project screening  
25 value have any relation to the PSE entitlements  
0294

1 JOHN RICHARD PAY  
2 that you just talked about? Is there any  
3 connection?

4 A. The PSE entitlement would be  
5 different if one evaluated the entitlement at  
6 each of those different oil prices due to the  
7 relationship I explained.

8 Q. Is there a time period with regard  
9 to the PSC entitlement where the price of the  
10 barrel of oil is looked upon? Is it annually?  
11 Is it as the market changes? How is that price  
12 looked at?

13 A. I don't know. I suspect it would  
14 depend on the precise terms of each individual  
15 contract.

16 Q. Do you know if there was any  
17 accounting principle that governed what price to  
18 use?

19 MR. TUTTLE: Objection to form,  
20 calls for a legal conclusion.

21 THE WITNESS: Can you specify  
22 accounting principle?

23 BY MR. HABER:

24 Q. Like, for instance, FAS 69?

25 A. I do not -- well, in relation to  
0295

1 JOHN RICHARD PAY  
2 accounting, no, I -- I'm struggling to answer  
3 your question in terms of precisely what you  
4 mean.

5 Q. Do you know what FAS 69 stands  
6 for?

7 A. Yes.

8 Q. What is FAS 69?

9 A. It is -- I think it's financial  
10 accounting standard issued by the FASB,  
11 dictating accounting and reporting requirements  
12 with particular emphasis, I believe, on oil and

13 gas entities, oil and gas producing entities.

14 Q. And I guess my earlier question  
15 was do you know if FAS 69 governed the price  
16 that should be used with regard to the PSC  
17 entitlements?

18 MR. TUTTLE: Objection to form.  
19 Be used in the contract? I'm just trying to  
20 understand. That has to be used inside a  
21 private contract or used for reporting purposes?

22 MR. HABER: That's a fair  
23 distinction. Let's take for reporting purposes.

24 THE WITNESS: Well, the answer to  
25 the question is no, I don't know if there is any

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1 JOHN RICHARD PAY  
2 specific direction in FAS 69 dictating  
3 production sharing contract entitlement  
4 calculations.

5 BY MR. HABER:

6 Q. How about in connection with the  
7 contract itself when the contracts were being  
8 negotiated, do you know if FAS 69 sort of  
9 governed the price that was determined to be  
10 used?

11 A. No.

12 Q. Was the pricing issue with regard  
13 to these PSCs an issue that required your  
14 attention during your tenure as a GRC?

15 A. Yes.

16 Q. Why is that?

17 A. There is a clause in regulation SX  
18 governing proved reserves definitions which  
19 indicates that prevailing prices and cost  
20 scenarios should be used in determining proved  
21 reserves. It was brought to my attention that  
22 some -- there is some uncertainty as to  
23 precisely what that means in terms of the price  
24 that one should assume in calculating proved  
25 reserves and the issue arises specifically in

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1 JOHN RICHARD PAY  
2 the reporting of reserves for production sharing  
3 contracts for the reason that I've explained.



4 It was Shell policy at the time to

5 use its reference price or project screening  
6 price for business planning as a fair reflection  
7 of the prevailing price situation, whereas an  
8 alternative interpretation as is indicated here  
9 is that one uses the exact price pertaining to  
10 the last day of the reporting period, so-called  
11 year end price.

12 The view that was reflected in the  
13 policy that we had was that by taking the price  
14 prevailing on one arbitrary day of the reporting  
15 period, the resulting reserves entitlement would  
16 be highly vulnerable to price fluctuations on a  
17 day-to-day basis through the reporting period  
18 and this was felt not to fairly reflect in a  
19 stable and consistent fashion reserve  
20 entitlements from one year to the next.  
21 Therefore, our policy was to use our internal  
22 planning price as being a reflection of the  
23 current price conditions on a consistent basis  
24 from one year to the next. So we used our  
25 reference price rather than the year end price  
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1 JOHN RICHARD PAY

2 as a means of calculating that entitlement.

3 Q. Do you know if the SEC had a  
4 position on which price period should be used  
5 for these contracts?

6 A. I don't know if it was before or  
7 after I was specifically made aware that it was  
8 required that we should use the year end price,  
9 but that is -- that is known to me today to be  
10 the opinion of the SEC.

11 Q. But at the time of this exhibit,  
12 which is Exhibit 6 in July of 2003, you were  
13 unaware of their position?

14 A. I was aware that there was a  
15 discussion around the issue and I was aware that  
16 the SEC favored the use of year end pricing. We  
17 felt we had an internal -- we felt we could  
18 argue the case for an alternative interpretation  
19 with some degree of rigor.

20 Q. Do you know when the issue was

21 raised by the SEC with Shell?

22 A. I can't recall exactly when.

23 Q. But certainly by this time, being  
24 July of 2003, it had been an issue that was  
25 raised; is that correct?

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1 JOHN RICHARD PAY

2 MR. TUTTLE: Objection to form,  
3 foundation.

4 THE WITNESS: I don't know.

5 BY MR. HABER:

6 Q. As part of your work on Rockford  
7 did you review the reserves that were connected  
8 to the PSC entitlements?

9 A. Yes.

10 Q. Were those reserves restated?

11 A. Yes.

12 Q. What was the reason for the  
13 restatement?

14 A. To adopt the SEC's preference for  
15 year end pricing rather than reference pricing  
16 as the basis for the entitlement calculation.

17 MR. HABER: Okay. Since we're  
18 going to go back to a prior exhibit, this is a  
19 good time for us to take a break.

20 THE VIDEOGRAPHER: We're going off  
21 the record. The time is 11:32 a.m.

22 (A brief recess was taken.)

23 THE VIDEOGRAPHER: We are back on  
24 the record. The time is 11:51 a.m.

25 BY MR. HABER:

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1 JOHN RICHARD PAY

2 Q. Mr. Pay, if you could turn back to  
3 Exhibit 5.

4 A. Yes.

5 Q. I want to ask you a question, a  
6 series of questions about the proposal  
7 concerning score cards, which is 1F on page 82,  
8 the Bates stamp.

9 Now, under the first sentence  
10 there's a paragraph in italics and it refers to  
11 an observation by the group reserves auditor in

12 the year end reserves report for 2001. Am I  
13 reading this correctly?

14 A. It seems so, yes.

15 Q. Now, the group reserves auditor,  
16 is that Anton Barendregt?

17 A. Yes.

18 Q. And am I correct that the  
19 observation that Mr. Barendregt makes is that  
20 there is a possibility that score cards with  
21 regard to reserves targets, "is seen to affect  
22 the objectivity of staff and some OUs when  
23 proposing reserves additions." Do you see that?

24 A. Yes, I see it.

25 Q. Do you recall having any

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1 JOHN RICHARD PAY  
2 discussions with Mr. Barendregt about what he  
3 writes here and what was written in that report?

4 A. I certainly discussed the issue  
5 with Mr. Barendregt. He was keen to remove  
6 reserves from score cards in order to avoid the  
7 possibility of behavior such as he's describing  
8 here.

9 Q. Are you aware of any examples  
10 where OU staff's objectivity was clouded by the  
11 reserves addition target in the score card?

12 MR. TUTTLE: Object to form,  
13 foundation, characterization of the document.

14 THE WITNESS: In my direct  
15 experience, no.

16 BY MR. HABER:

17 Q. Were you ever advised of an  
18 example where this occurred?

19 MR. TUTTLE: Objection.

20 BY MR. HABER:

21 Q. You can answer.

22 A. Mr. Roosch, my predecessor,  
23 related an incident in which he felt that there  
24 had been an inappropriate level of interest in  
25 booking reserves in a SNEPCO asset which he has

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1 JOHN RICHARD PAY  
2 successfully resisted.

3 Q. Did Mr. Roosch attribute the  
4 effort by SNEPCO to book the reserves to the  
5 score card?

6 A. That was the inference that he  
7 drew at the time in describing the situation to  
8 me.

9 Q. Other than that instance, can you  
10 think of any other examples that you were  
11 advised of?

12 A. Not that -- no.

13 Q. Okay. Other than with  
14 Mr. Barendregt, do you recall discussing the  
15 issue of score cards with anyone at Shell during  
16 your tenure as the group reserves coordinator?

17 A. Certainly as part of circulating  
18 this document and in discussion with some of the  
19 people who responded to it I discussed whether  
20 or not it was appropriate to have reserves on  
21 individual operating score cards. When I wrote  
22 this I was inclined to the view they should be  
23 removed just to remove the potential for this  
24 type of behavior.

25 The overwhelming response I got

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1 JOHN RICHARD PAY  
2 back to was that the views in the operating  
3 units were such that it was seen as a legitimate  
4 target provided it was properly -- properly  
5 controlled.

6 Q. Were you surprised by that  
7 feedback?

8 A. Not particularly. I also  
9 understand the argument in favor of retaining it  
10 in that reserves replacement is a reflection of  
11 the performance of a business and actually  
12 progressing projects. So to that extent it is a  
13 measure of the success that an operating company  
14 has in progressing its projects to a level of  
15 maturity that would enable execution and  
16 production and that is the fundamental reason  
17 why it was seen as my understanding as a  
18 worthwhile and useful performance indicator to  
19 retain.

20 Q. Now, did you discuss the issue  
21 with Mr. Brass?

22 A. I don't recall specifically  
23 discussing that issue with Mr. Brass.

24 Q. Generally, do you recall any  
25 discussions with Mr. Brass on the issue?

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1 JOHN RICHARD PAY

2 A. To me that sounds like the same  
3 question.

4 Q. Okay. Well, when I hear it I hear  
5 specific could be --

6 MR. TUTTLE: Every time you say  
7 specifically he's going to ask you generally, so  
8 if you don't have a recollection.

9 THE WITNESS: I don't recall  
10 discussing this issue with Mr. Brass.

11 MR. TUTTLE: Sorry.

12 MR. HABER: That's okay.

13 BY MR. HABER:

14 Q. Do you recall discussing the score  
15 card issue with Mr. Van der Vijver?

16 A. No.

17 Q. Do you recall discussing the issue  
18 with Mr. Nauta?

19 A. No.

20 Q. The same question with regard to  
21 Mr. Harper?

22 A. Also not.

23 Q. In this document on this page it  
24 appears that you're proposing an alternative to  
25 the score card. Is that correct?

0305

1 JOHN RICHARD PAY

2 A. May I have a minute just to reread  
3 the page?

4 Q. Please. In particular I'm looking  
5 at the paragraph that begins it is recommended  
6 to remove.

7 A. Yes.

8 Q. Okay. So am I correct that in  
9 this document, in particular what I've directed  
10 your attention to, you're proposing an

11 alternative to reserves additions in the score  
12 card?

13 A. This is what is written in this  
14 draft document, yes.

15 Q. And what is that proposal? What  
16 is the proposal?

17 I'm just trying to get what you  
18 were intending by this proposal.

19 As I understand it, a proposal is  
20 to use a system of milestones. What I'm trying  
21 to understand is why you made this proposal as  
22 opposed to keeping, in your mind, the reserves  
23 additions as part of the score card?

24 MR. TUTTLE: Object to form. You  
25 can answer.

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1 JOHN RICHARD PAY

2 THE WITNESS: I'm attempting in  
3 this recommendation, which is a draft  
4 recommendation, to address the auditor's concern  
5 in terms of having reserves replacement on score  
6 cards. I'm suggesting we respond to that  
7 concern by removing reserves replacement from  
8 the score card and replace it with alternative  
9 metrics, which will still encourage operating  
10 units to perform on project maturation, that  
11 being the beneficial part of having reserves  
12 replacement as a target.

13 BY MR. HABER:

14 Q. And those alternative metrics, are  
15 those reflected in the parenthetical which says  
16 VAR 3, VAR 4, FID and if appropriate  
17 confirmation of improved recovery performance?

18 A. Yes.

19 Q. Do you know if this  
20 recommendation, other than the feedback that you  
21 received, do you know if this recommendation was  
22 supported by Mr. Brass?

23 MR. TUTTLE: Objection,  
24 foundation.

25 THE WITNESS: No, and I don't

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1 JOHN RICHARD PAY

2 remember whether it was or not.

3 BY MR. HABER:

4 Q. Do you know if this recommendation  
5 was supported by any of your bosses?

6 MR. TUTTLE: Same objection.

7 THE WITNESS: No.

8 BY MR. HABER:

9 Q. You have no recollection?

10 A. Sitting here today, I can't even  
11 recall if this phrasing was retained for the  
12 final version that was submitted to management.  
13 What I do recall is that there was quite some  
14 resistance to it from my peers in the operating  
15 units.

16 (Pay Exhibit Number 7 was marked  
17 for identification.)

18 BY MR. HABER:

19 Q. I'm handing you Pay Exhibit 7 and  
20 I will identify this for the record while you're  
21 taking a look at it.

22 This is a document that's titled  
23 Note For Discussion Ep Proved Reserve  
24 Management. Its Bates numbers are RJW 00852948  
25 through RJW 00852965.

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1 JOHN RICHARD PAY

2 Mr. Pay, have you seen Exhibit 7  
3 before today?

4 A. Yes.

5 Q. Is this the final version of the  
6 draft note that we've been talking about a few  
7 moments ago?

8 A. It certainly is a later draft.  
9 Whether it is the final draft, I don't know.

10 Q. Okay. If you turn to page 8 of  
11 the exhibit which also on the Bates number ends  
12 852955 and the discussion of the score cards, if  
13 you just take a moment to look at it I'll ask  
14 you a question.

15 A. Yes.

16 Q. Am I correct that what's in this  
17 version of the note, which you said is a later  
18 version, that it's now -- you're now proposing



19 that the score card system with reserve  
20 additions be maintained; is that correct?

21 A. Yes, in response to the feedback I  
22 received from the operating units.

23 Q. Am I also correct that as I  
24 believe you just testified, that it was the  
25 feedback that you received to maintain it with a  
0309

1 JOHN RICHARD PAY  
2 system that would allow effective policing so  
3 that the score card system was not abused; is  
4 that correct?

5 MR. TUTTLE: Objection to form,  
6 characterization of prior testimony.

7 THE WITNESS: I'm afraid I didn't  
8 retain the first part of your question when you  
9 got to the end of it. Can you repeat it?

10 BY MR. HABER:

11 Q. Let me rephrase it.

12 If you look at the paragraph that  
13 begins however?

14 A. Yes.

15 Q. The sentence that begins, "the  
16 onus is on the center and OU technical  
17 management to ensure the system is not abused  
18 and that it is used as a stimulus for genuinely  
19 constructive behaviors."

20 A. Yes.

21 Q. What did you mean by that?

22 A. That it is the -- that if reserves  
23 additions are to remain on score cards that  
24 there has to be an effective control mechanism  
25 in place to ensure the proved reserves additions  
0310

1 JOHN RICHARD PAY  
2 are compliant.

3 Q. Who did you intend would ensure  
4 that there was such an effective control  
5 mechanism?

6 A. As stated here, primarily  
7 technical management at the OU -- in the OU who  
8 would be required to sign off on the reserves  
9 estimate with assistance from the center being

10 my role and my colleagues.

11 Q. When you say your colleagues, who  
12 are you referring to?

13 A. My supervisors.

14 Q. Now, did you intend at this time  
15 that there would be a written policy that would  
16 be used to ensure that the system was not  
17 abused?

18 MR. TUTTLE: Objection to form.

19 THE WITNESS: No.

20 BY MR. HABER:

21 Q. How did you intend to use the  
22 language here that the center and OU technical  
23 management would ensure that the system is not  
24 abused?

25 A. Well, we had our internal

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1 JOHN RICHARD PAY  
2 guidelines and that was the standard by which  
3 proved reserves were expected to be reported and  
4 I envisioned that as I state at the end of the  
5 paragraph a concerted effort to increase the  
6 level of awareness of importance in terms of  
7 compliance. It doesn't say so in so many words  
8 here, but to ensure people are aware of their  
9 requirements to comply with the guidance.

10 Q. And how was that level of  
11 awareness to occur?

12 A. I'm not sure I had a specific plan  
13 in mind at this time.

14 Q. After this time did you think  
15 about this further, about how to make people  
16 more aware?

17 A. Yes, I thought about it. I don't  
18 recall ever writing down a policy.

19 Q. Is it fair to say then that at the  
20 time you wrote this your intent was to ensure  
21 that the system was not abused through reference  
22 to Shell's guidelines and increased awareness of  
23 the guidelines?

24 MR. TUTTLE: Objection to form,  
25 characterization of the testimony.

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1 JOHN RICHARD PAY

2 BY MR. HABER:

3 Q. You can answer.

4 A. At the time I wrote this I'm  
5 envisioning that compliance would be in force  
6 through dissemination and education in relation  
7 to the guidelines.

8 Q. I guess I'm just trying to  
9 understand how -- through what mechanism would  
10 that information be disseminated?

11 A. I'm not sure I can recall that we  
12 ever got to the point of writing down a  
13 procedure, but shortly after this, one of the  
14 measures that we were in the process of  
15 introducing at the time that project Rockford  
16 started was to introduce regional resource  
17 volume managers. So that's effectively people  
18 performing my role in the center, but at the  
19 regional level, so an additional step in  
20 between. And part of the role that we -- that I  
21 foresaw for those positions was to have more  
22 continuous high level interactions with the  
23 people involved in the estimating and sign off  
24 process to ensure, to satisfy themselves that  
25 the guidelines were disseminated and added to on

0313 JOHN RICHARD PAY

2 a continuous basis as part of the reserves  
3 estimating process.

4 Q. As part of your work on Rockford  
5 do you recall discussing the score card system?

6 A. No.

7 Q. Do you know if there was a  
8 recommendation that came out of the Rockford  
9 analysis of whether to -- withdrawn.

10 Do you know if the score card  
11 system is in place today.

12 A. I believe the score card system is  
13 in place today.

14 Q. Are reserves replacement included  
15 in the score card?

16 A. I don't know.

17 Q. Do you know if as a consequence of

18 Rockford a recommendation was made to remove the  
19 reserves replacement target in the score card?

20 MR. TUTTLE: Objection to form,  
21 foundation.

22 THE WITNESS: I don't know for  
23 sure, no.

24 BY MR. HABER:

25 Q. Do you know if that was a

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1 JOHN RICHARD PAY  
2 recommendation from the law firm by the name of  
3 Davis Polk?

4 A. Again, for sure I don't know.

5 Q. Have you ever seen the report of  
6 the Group Audit Committee that was, at least the  
7 executive summary was publicly disseminated in  
8 or about March or April of 2004?

9 A. I have seen it. I did not spend a  
10 long time -- I would not say I've read it from  
11 start to finish and I'm currently familiar with  
12 its content.

13 Q. Are you aware of any  
14 recommendations that were made in that report?

15 A. No, sitting here today.

16 (Pay Exhibit Number 8 was marked  
17 for identification.)

18 BY MR. HABER:

19 Q. We are marking Pay Exhibit 8.  
20 While the witness is taking a moment to look at  
21 it I will identify it for the record.

22 It is an e-mail series, two  
23 e-mails. The latter e-mail is from Remco  
24 Aalbers to John Pay. The subject is EP reserves  
25 management and that e-mail is dated

0315

1 JOHN RICHARD PAY  
2 September 24, 2002 and the Bates number of this  
3 exhibit is V 00010390 through V 00010391.

4 A. Okay.

5 Q. Have you seen this e-mail exchange  
6 before today?

7 A. Yes. It's an e-mail that  
8 Mr. Aalbers sent to me.

9 Q. Is this e-mail in response to your  
10 e-mail which is Exhibit 5, the first page of  
11 that exhibit?

12 A. Yes.

13 Q. Other than through this e-mail, do  
14 you recall having any discussions about the  
15 draft note with Mr. Aalbers?

16 A. No, I don't recall.

17 Q. Other than this e-mail, do you  
18 recall any subsequent communications with  
19 Mr. Aalbers concerning the draft note?

20 A. I certainly replied to him on a  
21 couple of the points that he raises, by e-mail.

22 Q. If you look at the first page  
23 Mr. Aalbers comment to 1B it says, "need to  
24 think how to handle this adjusting the end  
25 result versus the auditors - not sure how the

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1 JOHN RICHARD PAY

2 others do -- I believe it should be it - but you  
3 do not want to be accused of misinforming your  
4 shareholders...or manipulating the books."

5 Do you have an understanding what  
6 Mr. Aalbers meant by this?

7 A. No. However, I agree with the  
8 sentiment he's expressing and I'm careful in the  
9 note I think to always make sure we are staying  
10 compliant with the SEC rules as we understand  
11 them, so I agree with his sentiment.

12 Q. Is it his sentiment you should be  
13 sensitive to ensuring compliance with the SEC?

14 A. Sorry, can you repeat the  
15 question.

16 Q. I said was it your understanding  
17 that he was expressing that Shell ought to stay  
18 compliant with the SEC rules?

19 A. He isn't saying that, but such  
20 assentment would be consistent with what he's  
21 saying, I would say.

22 Q. Do you recall replying to what he  
23 wrote here?

24 A. I remember feeling I had to  
25 respond to his comment in 1E.

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1 JOHN RICHARD PAY

2 Q. And what do you recall about your  
3 response?

4 A. I recall advising him that in my  
5 opinion he's drawn reference here to Appendix B,  
6 which is the potential reserves exposure  
7 catalog, suggesting that that should have a  
8 limited circulation and I replied to him along  
9 the lines that, well, yes, of course, it  
10 shouldn't be circulated unnecessarily, but  
11 actually I have no problem with it being  
12 circulated to management and to auditors, the  
13 purpose of preparing that appendix was indeed it  
14 would be available to such people.

15 Q. Did you have an understanding of  
16 what sort of trouble you would have if the  
17 potential reserves exposure list were to be in  
18 the hands of the SEC?

19 MR. TUTTLE: Objection to form,  
20 characterization of the document.

21 THE WITNESS: You would have to  
22 ask Mr. Aalbers what he felt by that statement,  
23 but I was quite clear that the items that were  
24 on the list were defensible, where they were  
25 defensible and would be debooked where they were

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1 JOHN RICHARD PAY

2 not defensible.

3 BY MR. HABER:

4 Q. So in your mind it was is  
5 certainly appropriate if the auditors or the SEC  
6 were to have seen the exposure list?

7 A. Indeed, because as part of the  
8 exposure list there was a summary of the  
9 reasoning or the justification behind retaining  
10 the bookings or not, as the case may be.

11 Q. Do you recall Mr. Aalbers  
12 responding to your response?

13 A. No.

14 (Pay Exhibit Number 9 was marked  
15 for identification.)

16 BY MR. HABER:

17 Q. While the witness is looking at  
18 the document that we've just marked as  
19 Exhibit 9, Pay Exhibit 9, I will identify it for  
20 the record. It is a series of e-mails between  
21 John Pay and Sarah Bell, the last of which is  
22 dated October 9, 2002 from Mr. Pay to Sarah  
23 Bell. The Bates number is PER 00031460 through  
24 PER 00031462.

25 MR. HABER: Why don't we change  
0319

1 JOHN RICHARD PAY  
2 the tape and then I'll ask some questions and  
3 then we'll be able to break for lunch.

4 THE VIDEOGRAPHER: This marks the  
5 end of tape one, Volume II, in the deposition of  
6 Mr. Pay. We're going off the record. The time  
7 is 12:26 p.m.

8 (A brief recess was taken.)

9 THE VIDEOGRAPHER: This marks the  
10 beginning of tape two, Volume II, in the  
11 deposition of Mr. Pay. We're back on the  
12 record. The time is 12:27 p.m.

13 BY MR. HABER:

14 Q. Mr. Pay, do you recall seeing this  
15 e-mail exchange before today?

16 A. Well, evidently I must have seen  
17 it before since I'm engaged in it, but it's  
18 not -- I've just been reminded of it, yeah.

19 Q. Do you recall looking at your  
20 e-mail to Ms. Bell on the first page of the  
21 document expressing surprise about the feelings  
22 of the recipients of the draft note concerning  
23 the score card issue?

24 A. Well, as I've testified in a  
25 previous answer to your question or in answer to  
0320

1 JOHN RICHARD PAY  
2 a previous question, yes, I was surprised people  
3 were so strongly in favor of retaining reserves  
4 replacement on the score card and the reason  
5 offered was because of the benefits in relation  
6 to ensuring project progress and development of  
7 the business.



8 Q. Now, if you turn the page, and  
9 again this is an e-mail from Ms. Bell to you  
10 dated October 10, 2002 where she's commenting on  
11 the draft note, and I would like to direct your  
12 attention to the last paragraph that says page  
13 8.

14 A. Uh-huh. Yes.

15 Q. If you see the second sentence it  
16 says, "meetings I had with BP earlier this year  
17 strongly implied that they only disclose volumes  
18 associated with signed contracts as proved  
19 reserves to the SEC. This is in contradiction  
20 to SDA's policy of booking the total 'low  
21 estimate' on the grounds that the eventual sales  
22 are certain."

23 Do you know how long the policy  
24 that's discussed in this e-mail was in effect at  
25 SDA?

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1 JOHN RICHARD PAY

2 A. No.

3 Q. Do you know if it was in effect at  
4 the time of the Gorgon booking?

5 A. No.

6 Q. Did you ever ask Ms. Bell?

7 A. Not that I recall.

8 Q. Did you ever investigate the  
9 issue?

10 A. Not that I recall specifically in  
11 relation to SDA.

12 Q. Did you ever ask anyone to  
13 investigate the issue in relation to SDA?

14 A. I don't think so.

15 Q. As part of your work in Rockford  
16 do you know if this issue was reviewed and  
17 considered?

18 A. It wasn't by me and I don't know  
19 if it was by anyone else.

20 Q. If you look at the again, her  
21 e-mail to you, this time under the portion of  
22 the page that says page 2. At the bottom of the  
23 paragraph she writes, "on a related matter -  
24 perhaps there is potential for a 'reserves

25 reporting module' to be included in one of the

0322

1 JOHN RICHARD PAY

2 reserve engineering phase II courses. I am not  
3 aware of any reserves formal training within  
4 Shell - as far as I understand people pick up on  
5 the job - which could lead to  
6 misinterpretation."

7 Do you recall responding to

8 Ms. Bell with regard to what I just read into  
9 the record?

10 A. No, I don't recall responding. If  
11 you have a response you would like to show me it  
12 would perhaps refresh my memory.

13 Q. I don't at the moment. Again,  
14 just looking for your recollection.

15 A. Uh-huh.

16 Q. Do you know if subsequent to this  
17 e-mail, which is October of 2002, Shell  
18 implemented a formal training course, as  
19 Ms. Bell is suggesting here?

20 MR. TUTTLE: Objection to form,  
21 foundation, characterization of the document.

22 THE WITNESS: The -- yes. Shell  
23 did introduce additional training pursuant to  
24 Rockford, project Rockford.

25 BY MR. HABER:

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1 JOHN RICHARD PAY

2 Q. So it was after the announcements  
3 of the recategorization?

4 A. Correct.

5 Q. Do you know who gives those  
6 courses?

7 A. I don't know everyone who is  
8 involved in delivering those courses. By chance  
9 I met Jan-Willem Roosch in the restaurant at  
10 work and he mentioned that he was involved, this  
11 was a few weeks ago, in delivering those  
12 courses.

13 Q. Has Shell made it mandatory for  
14 reservoir engineers to attend these courses?

15 A. Shell's made it mandatory for

16 everybody involved in the proved reserves  
17 estimating process to attend these periodically.

18 Q. How periodically?

19 A. I don't know exactly the standard  
20 that applies. For me personally it applies  
21 every two years.

22 Q. Such a requirement was not  
23 existing prior to Rockford; is that correct?

24 A. That's correct.

25 MR. HABER: This is a good time to  
0324

1 JOHN RICHARD PAY

2 break for lunch.

3 THE VIDEOGRAPHER: We are going  
4 off the record. The time is 12:33 p.m.

5 (Whereupon, at 12:33 p.m., a lunch  
6 recess was taken.)

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0325

1 JOHN RICHARD PAY

2 AFTERNOON SESSION

3 (1:20 p.m.)

4 THE VIDEOGRAPHER: We are back on  
5 the record. The time is 1:20 p.m.

6

7 EXAMINATION BY COUNSEL FOR  
8 THE LEAD PLAINTIFF -- RESUMED  
9

10 BY MR. HABER:

11 Q. Good afternoon, Mr. Pay.

12 A. Good afternoon.

13 Q. Do you know -- I believe we  
14 mentioned his name a couple times through this  
15 deposition, but just for clarity sake, who is  
16 Frank Coopman?

17 A. Frank Coopman was the chief  
18 financial officer of Exploration and Production.  
19 Whether he held that position at the beginning  
20 of the time that I took the group reserves  
21 coordinating job, I can't remember, but  
22 certainly he was through much of that period.

23 Q. Do you know who Mr. Coopman  
24 reported to?

25 A. Mr. Van der Vijver, I believe.

0326  
1 JOHN RICHARD PAY

2 Q. Have you heard of a dotted line  
3 reporting within Shell?

4 A. In general or specifically for  
5 Mr. Coopman?

6 Q. In general.

7 A. I understand what the term means,  
8 yes.

9 Q. What does that term mean?

10 A. Not a direct supervisory reporting  
11 relationship, but one that is nevertheless  
12 beneficial to the person that the -- at each end  
13 of the dotted line. So typically an example  
14 where that would exist would be where we have  
15 teams of in my own field of expertise, if we  
16 have field development teams, the various  
17 individual members of that team will have  
18 different areas of specialization, but will  
19 report directly to the project manager, whereas  
20 they would have a dotted line relationship to  
21 the senior engineer in that area of expertise  
22 within that organization.

23 Q. Did you have a dotted line person

24 that you reported to?

25 A. Not that I'm aware of.

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1 JOHN RICHARD PAY

2 Q. With regard to Mr. Coopman, do you  
3 know if he had a dotted line person that he  
4 reported to?

5 A. Not that I'm aware of.

6 Q. Do you know who Judith Boynton is?

7 A. I believe she was -- I don't know  
8 formally her job title, but I understood she was  
9 a senior financial officer within the group.

10 Q. Do you know if Ms. Boynton was the  
11 dotted line person to whom Mr. Coopman reported?

12 A. I think I already stated I'm not  
13 aware of any dotted line relationships for  
14 Mr. Coopman.

15 Q. Do you recall during the time  
16 where Mr. Coopman served as the CFO of EP in  
17 your tenure as GRC having discussed Shell's  
18 reserves replacement ratio, generally speaking  
19 now?

20 A. With whom?

21 Q. Mr. Coopman, I'm sorry?

22 A. From time to time, yes.

23 Q. Do you recall the sum and  
24 substance of those discussions?

25 A. I would characterize them

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1 JOHN RICHARD PAY

2 generally as being information similar to the  
3 type of information we reviewed earlier under I  
4 think it was Exhibit 5. So information on  
5 latest estimates and so forth -- no, it wasn't  
6 5. 6.

7 Q. Do you recall having discussions  
8 with Mr. Coopman concerning the projects or  
9 operating units that were identified on the  
10 potential reserves exposure catalog?

11 A. Yes.

12 Q. When do you recall having those  
13 discussions?

14 A. Specifically towards the end of

15 2002 we considered the items on the list and we  
16 made proposals for the approval of Mr. Coopman  
17 and Mr. Brass of certain debookings that we --  
18 that I was recommending. So that is a specific  
19 instance of, frankly the only one I can  
20 specifically recall, of discussing those items  
21 with Mr. Coopman.

22 Q. Do you recall Mr. Coopman  
23 expressing any concern about the items on that  
24 list?

25 A. At that time, no.

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1 JOHN RICHARD PAY

2 Q. How about subsequent to that time?

3 A. In connection with project  
4 Rockford, once the decision had been made to  
5 recategorize reserves, Mr. Coopman expressed the  
6 opinion to me that all items on the list ought  
7 to be recategorized for the sake of prudence.

8 Q. Do you know if Mr. Coopman was on  
9 a team that was responsible for conducting the  
10 investigation that was project Rockford?

11 MR. TUTTLE: Objection,  
12 foundation.

13 THE WITNESS: I only hesitate  
14 because I'm not sure there was a defined team in  
15 relation to project Rockford, but certainly from  
16 the instigation of project Rockford I and  
17 Mr. Coopman worked very closely on the project.

18 BY MR. HABER:

19 Q. Were there other people who you  
20 worked closely with on the project?

21 A. Initially it was Mr. Bell and  
22 Mr. Darley.

23 Q. Who is John Darley?

24 A. John Darley was the EP executive  
25 responsible for the technology function within

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1 JOHN RICHARD PAY

2 Exploration and Production.

3 Q. Prior to your work with Rockford  
4 had you interacted with Mr. Darley in your  
5 function as group reserves coordinator?

6 A. No, not substantially.

7 Q. When you say not substantially, in  
8 what way did you interact with him?

9 A. He was, I believe, present, for  
10 example, at ExCom meetings where I may have  
11 delivered presentations containing information  
12 similar to that contained in Exhibit 5. So he  
13 would have been present when I was discussing  
14 these conditions with ExCom generally, but I  
15 don't recall any discussions with him one to one  
16 with one another.

17 Q. Do you recall ever having any  
18 discussions with Mr. Coopman concerning the  
19 Sarbanes-Oxley Act of 2002?

20 A. Yes. I'm trying to remember  
21 precisely when. Certainly in relation to  
22 project Rockford, yes.

23 Q. And what was the sum and substance  
24 of those discussions?

25 MR. TUTTLE: I'm just going to  
0331

1 JOHN RICHARD PAY  
2 instruct the witness if those discussions  
3 included counsel to Shell that we should go off  
4 the record and talk about that to ensure we  
5 don't waive a privilege inadvertently.

6 MR. HABER: Okay, that's fair.

7 MR. TUTTLE: If your discussion  
8 involving Sarbanes-Oxley involved counsel we  
9 should talk about that off the record.

10 THE WITNESS: That's not how I was  
11 going to characterize my response.

12 MR. TUTTLE: Okay.

13 THE WITNESS: Really all I can  
14 recall in relation to such discussions was that  
15 Mr. Coopman took the Sarbanes-Oxley Act and  
16 requirements and what it embodied very seriously  
17 and I recall he spent a lot of time  
18 familiarizing himself with that act and taking  
19 actions, the detail of which I don't know,  
20 within his financial community to ensure that  
21 appropriate actions were taken, to assure  
22 compliance. And my perception is that he saw



23 the role of reporting the Rockford project

24 essentially a part of that piece of work.

25 BY MR. HABER:

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1 JOHN RICHARD PAY

2 Q. Do you recall any discussions with  
3 Mr. Coopman prior to Rockford where the subject  
4 matter was the requirements under  
5 Sarbanes-Oxley?

6 A. I don't recall any particular one  
7 on one discussions I had with him before then.

8 MR. HABER: Let's mark.

9 (Pay Exhibit Number 10 was marked  
10 for identification.)

11 MR. HABER: For the record, we've  
12 marked as Pay Exhibit 10 is a one page series of  
13 e-mails being two e-mails. The last of which is  
14 from Frank Coopman to John Pay with a cc to  
15 Lorin Brass. It's dated January 29, 2003 and  
16 the subject line says reserves letter of  
17 assurance and there are two Bates numbers on  
18 this. The first one is V 00070710 and the  
19 second one is DB 04809.

20 THE WITNESS: Yes.

21 BY MR. HABER:

22 Q. Have you seen this e-mail  
23 correspondence before today?

24 A. Yes.

25 Q. Okay. If you look at the e-mail

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1 JOHN RICHARD PAY

2 which is the last one from Mr. Coopman to you it  
3 says, "with all due respect, I think you should  
4 first sit down with me and/or Lorin, I'm not  
5 just a joker signing the reserves and I want to  
6 give my boss completed staff work. If you do  
7 not change your approach I will no longer sign  
8 off!"

9 Can you tell me the context in  
10 which this e-mail was sent?

11 MR. TUTTLE: Objection to the  
12 extent it calls for speculation.

13 MR. HABER: It's in response to an

14 e-mail that he sent.

15 MR. TUTTLE: You're asking him why  
16 Mr. Coopman sent this e-mail?

17 MR. HABER: If he has an  
18 understanding in the context in which it came,  
19 yes.

20 THE WITNESS: It's in the context  
21 of an e-mail I had written to -- I'm struggling  
22 to understand what it is that you would like me  
23 to say.

24 I had sent an e-mail to Jan-Willem  
25 van der Vijver copying Lorin Brass and Frank

0334

1 JOHN RICHARD PAY

2 Coopman. I believe this was in reply to another  
3 e-mail Walter had sent me previously and Frank  
4 Coopman, I think, is registering some discomfort  
5 with the fact I was communicating directly with  
6 Walter without first consulting him or Lorin.

7 BY MR. HABER:

8 Q. Is that what you understood him to  
9 mean by I'm not just a joker signing the  
10 reserves and I want to give my boss completed  
11 staff work?

12 A. I understood that at the time to  
13 mean that he was disappointed that I had not  
14 discussed my e-mail to Walter with him before  
15 sending it.

16 Q. Do you recall having any verbal  
17 communication with Mr. Coopman about this  
18 subsequent to the e-mail?

19 A. I know that I discussed this with  
20 him. I cannot sitting here today remember  
21 exactly what was said, but the tone of my  
22 discussion was apologetic, I believe.

23 Q. The subject line of your e-mail  
24 says reserves letter of assurance?

25 A. Yes.

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1 JOHN RICHARD PAY

2 Q. As does the other one. What is a  
3 reserves letter of assurance?

4 A. This was a letter signed each year

5 as part of the compilation of the reserve  
6 statement for form 20F. It was signed by, in  
7 this case it would have been signed by  
8 Mr. Coopman, the chief financial officer, and  
9 Lorin Brass, the director, with responsibility  
10 for preparing those numbers. And it was a  
11 letter to, I believe, the external auditors KPMG  
12 and PricewaterhouseCoopers to the effect giving  
13 their approval of the numbers and/or endorsement  
14 of the numbers that had been compiled.

15 Q. Now, the signature that you just  
16 talked about, is that a signature on a  
17 certification that is included in the 20F?

18 MR. TUTTLE: Objection to form,  
19 foundation.

20 THE WITNESS: Are you asking me if  
21 that letter itself was reproduced in the 20F?

22 BY MR. HABER:

23 Q. Let me rephrase that. You  
24 mentioned in your testimony a moment ago that  
25 the letter each year, you say this was a letter

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1 JOHN RICHARD PAY  
2 signed each year as part of the compilation as  
3 part of the reserve statement for the form 20F.  
4 And I guess I want to know is that letter  
5 included in the 20F?

6 A. No. I intended that to mean the  
7 reserves that are included in the 20F are the  
8 subject of a letter that is signed.

9 Q. Now, do you know, are you aware of  
10 a Sarbanes-Oxley certification being included in  
11 the form 20F?

12 A. No.

13 Q. Now, if you look at the e-mail  
14 from you to Mr. Van der Vijver, the second  
15 paragraph in particular it says, "KPMG have  
16 asked us to acknowledge certain areas of  
17 potential overstatement of reserves in the  
18 letter of assurance that Frank and Lorin will  
19 give them."

20 Who did you communicate with at  
21 KPMG where this request was made?

22 A. If it wasn't Mr. Van Dalen it  
23 would have been one of his assistants.  
24 Q. Do you recall when the request was  
25 made?

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1 JOHN RICHARD PAY

2 A. No.

3 Q. Do you recall the sum and  
4 substance of -- withdrawn.

5 How is that request made?

6 A. I'm struggling to remember  
7 precisely the manner in which it was brought to  
8 my attention, whether it was a written statement  
9 or whether it was verbal. That's the only  
10 reason I hesitate, but the matters that I've  
11 drawn attention to here were brought to our  
12 attention by KPMG as being areas that they  
13 stated here felt there may be a potential for  
14 overstatement and wished to have some comfort  
15 that the letter of assurance, at least  
16 acknowledged those areas.

17 Q. Do you recall if the letter of  
18 assurance did acknowledge those areas?

19 A. To the best of my recollection, I  
20 think it did.

21 Q. Did you prepare the letter of  
22 assurance?

23 A. I -- I certainly assisted in its  
24 preparation. Whether I was the sole author, I  
25 can't remember.

0338

1 JOHN RICHARD PAY

2 Q. If you look down to the last full  
3 bodied paragraph, the one that begins further  
4 uncertainties?

5 A. Yes.

6 Q. There is a reference to a volume  
7 of cash again reserves. To what does that  
8 refer?

9 A. At this time, at the end of 2002  
10 we registered reserves for the cash again field,  
11 I believe, in a quantity of 380 million barrels.  
12 Very late in the process we discovered that

13 there had been a calculation error, an  
14 arithmetic can error in the calculation of that  
15 figure such that -- -- it wasn't a calculation  
16 error, it was a misunderstanding, I think on the  
17 part of those preserving the reserves estimates  
18 to cash again. We discovered that they had  
19 included in that figure of 380 million barrels a  
20 figure of 45 million barrels that would have  
21 been produced beyond the end of the production  
22 license for cash again. The reason for the  
23 uncertainty, as I recall, stemmed from there  
24 being a lack of clarity on precisely the  
25 duration of that production license.

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1 JOHN RICHARD PAY

2 Q. In particular, what was the issue  
3 that surrounded this lack of clarity on the  
4 duration of the production license?

5 A. As I recall it, it was different  
6 interpretations of what the wording of the  
7 license actually implied. As I recall it, the  
8 duration of the license was clear in terms of  
9 number of years. The issue that was not clear  
10 from the terms in the license was when that  
11 period began. And as we were reviewing this we  
12 came to the conclusion that an earlier start  
13 date and therefore an earlier end date would be  
14 appropriate in reading the license which would  
15 mean some of the volume that had been registered  
16 and included in all our tabulation and data  
17 included that 45 million barrels that would fall  
18 outside the license period.

19 Q. And who was taking the contrary  
20 position?

21 A. Again, the cash again operating  
22 unit who had originally filed the numbers.

23 Q. And who was that?

24 A. I believe my contact in that  
25 organization was Zaheer Malik, Z-A-H-E-E-R new

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1 JOHN RICHARD PAY

2 word, M-A-L-I-K.

3 Q. Now, was Mr. Malik an employee of

4 Shell?

5 A. Yes.

6 Q. This would then be the operating  
7 unit in cash again or Kazakhstan?

8 A. They were not physically located  
9 in Kazakhstan, as I recall, and we were not the  
10 operator of that field. The team representing  
11 Shell's interest was based in The Hague in  
12 Rijswijk.

13 Q. Who was the operator of that  
14 project?

15 A. I believe it was Agip, A-G-I-P.

16 Q. Had the project reached FID at  
17 this time? At this time being January of 2003?

18 A. I understood that it had.

19 Q. Do you know if any reserves that  
20 were booked as proved in the cash again project  
21 had been restated as part of Rockford?

22 A. I can't recall if they were or  
23 not.

24 Q. With regard to the work you had  
25 done on Rockford, do you recall reviewing and  
0341

1 JOHN RICHARD PAY

2 considering the cash again booking?

3 A. Yes, we did. I'm struggling to  
4 recall what the outcome of the Rockford work on  
5 -- specific was.

6 Q. Do you recall what the substance  
7 of the consideration in the review was?

8 A. I believe the issue was whether in  
9 hindsight, in fact, full commitment to  
10 proceeding with the project had at that  
11 particular time, the end of 2002, been achieved.

12 Q. And what were you looking at with  
13 regard to the analysis concerning full  
14 commitment to proceeding with the project? What  
15 factors were you looking at?

16 A. Internal approvals, approvals of  
17 all the partners in the venture. All government  
18 approvals and permits required to execute the  
19 development. I believe it was subsequently  
20 found that there were one or two that were not

21 actually achieved until the year after.

22 Q. You're referring now to government  
23 approvals?

24 A. I believe that was the issue.

25 Q. Do you recall having any

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1 JOHN RICHARD PAY

2 discussions with Ms. Boynton concerning the  
3 issues that were raised by this e-mail, the  
4 e-mail now is from you to Mr. Van der Vijver?

5 A. I think I can honestly say I've  
6 never had a conversation with Ms. Boynton.

7 Q. Okay.

8 A. Sorry. Correct that.

9 I delivered a report to her as  
10 part of project Rockford at a hotel where she  
11 was staying and that, as I recall, is the only  
12 interaction I had with her.

13 Q. Prior to Rockford you don't recall  
14 any interaction?

15 A. Absolutely not.

16 Q. Did Mr. Coopman ever communicate  
17 to you the relationship that he had with  
18 Ms. Boynton?

19 A. Yes.

20 Q. And do you recall what he said?

21 A. He indicated to me that he did in  
22 a professional sense not get along with  
23 Ms. Boynton very well and had therefore -- had  
24 been previously working, as I understand it,  
25 directly for her and had chosen to cease that

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1 JOHN RICHARD PAY

2 job and come to work in EP instead.

3 Q. Did he explain to you why in a  
4 professional way they had not gotten along?

5 A. Not in detail, no.

6 Q. Do you recall making any  
7 presentations to the CMD during your tenure as  
8 GRC?

9 A. To the CMD, only in connection  
10 with project Rockford during and after  
11 December 2003.



12 Q. Prior to project Rockford do you  
13 recall being asked to prepare materials in  
14 connection with a CMD meeting?

15 A. Yes.

16 Q. And when was that?

17 A. There was one specific occasion  
18 on -- I'm just trying to remember.

19 My recollection is that in  
20 October 2003 there was -- I believe it was a CMD  
21 meeting that took place on the, I think it was  
22 the 21st of October, at which Walter, Walter van  
23 der Vijver had asked me to prepare some  
24 information that he would then present. I was  
25 not myself present in that meeting.

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1 JOHN RICHARD PAY

2 Also, I understand that some of  
3 the documents that I did prepare during my  
4 tenure of which Exhibit 5 would be a type  
5 example, that at least some of those documents I  
6 understand were made available to the CMD.

7 Q. And what's the basis of your  
8 understanding?

9 A. My recollection or the impression  
10 I have is that there were notes that were  
11 prepared for CMD.

12 Q. Is it possible the meeting that  
13 you're referring to in October of 2003 was a  
14 meeting to the Group Audit Committee?

15 A. No. That was a separate meeting  
16 at which I was present.

17 Q. Okay. Were you invited to attend  
18 that meeting?

19 A. Which meeting?

20 Q. I'm sorry, the Group Audit  
21 Committee meeting?

22 A. I believe Frank Coopman was  
23 invited to attend and he asked me to attend with  
24 him.

25 Q. Did you, in fact, attend that

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1 JOHN RICHARD PAY

2 meeting?

3 A. Yes.

4 Q. Did you stay for the entire  
5 meeting?

6 A. No. I was present only for the  
7 topic that Mr. Coopman and I were specifically  
8 there to present.

9 Q. And what topic was that?

10 A. The Group Audit Committee I  
11 presume through its chairman had asked  
12 Mr. Coopman to prepare a -- sorry, strike that.

13 I don't know if Mr. Coopman was  
14 asked to prepare or whether he volunteered it,  
15 so sorry, strike that.

16 But the two items on the agenda  
17 were to provide the Group Audit Committee with  
18 feedback, a report on status of the progress  
19 in -- that had been made in relation to the  
20 group reserves auditors recommendations at the  
21 end of 2002 and my mind's gone blank on what the  
22 second agenda item was.

23 Q. Do you recall if the second agenda  
24 item had to do with the status of the reserve  
25 situation in Oman, Gorgon and Nigeria SPDC?

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1 JOHN RICHARD PAY

2 MR. TUTTLE: Objection,  
3 foundation.

4 BY MR. HABER:

5 Q. You can answer.

6 A. It certainly was not that.

7 Q. Do you recall during the time that  
8 you attended the meeting, the GAC meeting, those  
9 issues, those particular operating units or  
10 projects were discussed?

11 A. No, they were not, to the best of  
12 my knowledge.

13 Q. You mentioned auditors  
14 recommendations that were made at the end of  
15 2002. Do you recall what those recommendations  
16 were?

17 A. I'm sorry, it probably seems like  
18 I have an atrocious memory. If you have the  
19 document available I could refresh my --

20 Q. If I had it I would refresh your  
21 recollection. I'm just trying to see what you  
22 know.

23 A. There were I think seven  
24 recommendations by the reserves auditor as part  
25 of his end of year report at the end of 2002. I  
0347

1 JOHN RICHARD PAY  
2 can't remember specifically what the issues  
3 were.

4 Q. Okay. When you were referring to  
5 the auditor's recommendations you were referring  
6 to the group reserves auditors recommendations?

7 A. Yes.

8 Q. You were not referring then to any  
9 recommendations that may have been made by the  
10 external auditors?

11 A. No.

12 Q. Okay. And if I understand it  
13 correctly, those recommendations that were made  
14 by the group reserves auditor, were they also  
15 included in his year end report?

16 A. That's where they were documented.

17 Q. Okay. Do you know if the Group  
18 Audit Committee acted on those recommendations?

19 MR. TUTTLE: Objection, form,  
20 foundation.

21 THE WITNESS: No.

22 BY MR. HABER:

23 Q. During the part of the meeting  
24 that you attended did the -- did any member of  
25 the Group Audit Committee say that they were  
0348

1 JOHN RICHARD PAY  
2 favorably supportive of the recommendations that  
3 Mr. Barendregt made in his report?

4 A. I don't recall. My recollection  
5 of the meeting was that the Group Audit  
6 Committee of which this meeting -- meeting of  
7 which this was one item on the agenda was that  
8 day running late, behind schedule. Mr. Coopman  
9 and I were kept waiting for quite a period of  
10 time before we were invited in for the subject

11 matter. We had a presentation prepared which  
12 had been submitted in advance to the group which  
13 we were prepared to present. There had also  
14 been a briefing paper that had been submitted I  
15 believe some weeks in advance, as well. And  
16 when we walked into the meeting the chairman  
17 suggested that since they were running late the  
18 presentation would be dispensed with and he  
19 invited simply a question and answer session  
20 from the members of the Group Audit Committee  
21 which is then what proceeded. And my  
22 recollection is most of that discussion centered  
23 around the recommendation that we were making  
24 that proved reserves from major projects should  
25 be deferred until FID. My recollection is the  
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1 JOHN RICHARD PAY

2 Group Audit Committee, two or three of its  
3 members spoke, some in favor of the  
4 recommendation, some against. Beyond that, I  
5 don't recall any substantive discussion.

6 Q. Do you recall who spoke in favor  
7 of the recommendation?

8 A. I have no idea who these people  
9 were.

10 Q. How many members of the Group  
11 Audit Committee were there?

12 A. Present in the room, I would guess  
13 maybe 10. 8 to 10, something like that.

14 Q. Who was the Chair of the  
15 committee?

16 A. I believe that's Mr. Aad Jacobs  
17 or was at the time.

18 Q. I think I asked you about the  
19 Group Audit Committee when you talked about the  
20 CMD meeting, so let's talk about that meeting.

21 You said that you recall a CMD  
22 meeting on October 21, 2003?

23 A. I recall it because it was  
24 happening at the same time.

25 Q. Did the CMD meeting precede or  
0350

1 JOHN RICHARD PAY

2 follow the Group Audit Committee meeting?

3 A. My recollection is that the two  
4 meetings proceeded in parallel, at the same  
5 time.

6 Q. Were you invited to attend to make  
7 a presentation on a particular issue or issues?

8 MR. TUTTLE: Objection, form.  
9 It's inconsistent with his prior testimony.

10 MR. HABER: Okay. I'll rephrase.  
11 I'll withdraw.

12 BY MR. HABER:

13 Q. Let me just go back.

14 Did you attend that October 21,  
15 2003 CMD meeting?

16 A. No.

17 Q. Okay. Do you recall preparing any  
18 materials in connection with that meeting?

19 A. Yes. I recall preparing two or  
20 three slides that Walter would present and  
21 delivering, hand delivering those slides to  
22 Mr. Van der Vijver before the CMD meeting  
23 started.

24 Q. And do you recall what the nature  
25 of those slides were, what the content of those  
0351

1 JOHN RICHARD PAY

2 slides were?

3 A. It was in relation to the latest  
4 estimate as it was then for proved reserves  
5 additions in 2003.

6 Q. Did that information include  
7 information concerning PDO?

8 A. I can't remember.

9 Q. Do you know if that information  
10 included information concerning SPDC?

11 A. Yes, it did.

12 Q. What in particular about SPDC was  
13 included in the slides?

14 A. Through 2000 -- well, beginning in  
15 2002 and proceeding through 2003 there had been  
16 a study in progress, which I referred to  
17 previously in my testimony as the Kluesner  
18 study, which was an attempt to gain a deeper

19 understanding of the reserves disposition in  
20 Nigeria SPDC. Through 2003 -- from earlier in  
21 2003, typically quarter one, quarter two, the  
22 information, the preliminary information that  
23 had come from that study was that areas had been  
24 identified in the proved reserves balance of  
25 SPDC that were not complying with the SEC rules.  
0352

1 JOHN RICHARD PAY

2 This suggested that those particular volumes may  
3 well need to be debooked at the next report end  
4 of year report which is at the end of 2003.

5 However, the information that also  
6 accompanied that preliminary information  
7 concerning noncompliant reserves. At the same  
8 time the study team was reporting that they  
9 believed that they had identified several areas  
10 where reserves could have been booked but had  
11 not been. Therefore, the perception was that  
12 whilst some debookings would need to be made at  
13 the end of 2003, also some new bookings could be  
14 made to other properties and fields. Through  
15 2003, the majority up to that point in October I  
16 in my role had formed the view that while some  
17 debookings would be necessary they would be  
18 counteracted by some bookings and there would be  
19 a -- there may be a net -- negative revision,  
20 but I think through much of the year I was  
21 thinking that would be -- according to the  
22 information I had available to me, I had the  
23 impression that would be on the order of  
24 200 million barrels negative revision.

25 I believe as part of the

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1 JOHN RICHARD PAY

2 information I gave on SPDC in the presentation  
3 to which you're referring, I was at that stage  
4 beginning to contemplate that the volume might  
5 be bigger than 200, although I had no clear  
6 evidence for that at that time. Such evidence  
7 came on November 14th, some three, four weeks  
8 later, but I indicated in that slide that the  
9 volume to be debooked may be bigger than

10 200 million barrels, although we didn't know

11 precisely how much at that stage.

12 Q. What happened on November 14th?

13 A. My recollection is that on  
14 November 14th we received a report or a  
15 communication from Nigeria from the studies team  
16 which indicated that whilst previously they had  
17 been of the opinion that there would be these  
18 positive bookings possible to offset the  
19 debookings, that that was no longer the case  
20 and, in fact, there were no or very limited  
21 opportunities to add reserves to the inventory  
22 on the basis of the work they had done.

23 Q. Do you recall any other findings  
24 of -- that were made and that were related to  
25 you on November 14th?

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1 JOHN RICHARD PAY

2 A. From that particular study?

3 Q. Yes.

4 A. Not -- not specifically, no.

5 Q. Okay. Since we're on it --

6 (Pay Exhibit Number 11 was marked  
7 for identification.)

8 BY MR. HABER:

9 Q. I'm going to hand you what we just  
10 marked as Pay Exhibit 11. While Mr. Pay is  
11 looking at the document I'm going to identify it  
12 for the record. It's a series of e-mails with  
13 an attachment. The last of the e-mails is from  
14 John Hoppe, H-O-P-P-E, dated February 5, 2003.  
15 It's to Mr. Pay with a cc to Anton Barendregt,  
16 Phil Davis, Ojo Sanni, Mark Corner, Guy Cowen  
17 and Promise Egele.

18 The subject line reads SPDC  
19 forecast constrain reserve estimates versus  
20 business plan. There are two Bates ranges  
21 identified in the document. The first one is V  
22 00130581 through V 00130589 and the second one  
23 is Corner, C-O-R-N-E-R, 00579 through Corner  
24 00587.

25 A. I haven't read through it fully

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1 JOHN RICHARD PAY

2 now, but I'm reminded of the issue.

3 Q. I have a few questions about the  
4 exhibit. We've been talking about this Kluesner  
5 team and I think this document precedes the  
6 team, but it does sort of talk about the issues  
7 with SPDC that we've been talking about  
8 yesterday and today so I want to ask you a  
9 couple of questions, almost as sort of a  
10 starting point.

11 With regard to the e-mail from  
12 Mr. Hoppe to you and it's -- I want you to look  
13 at the third paragraph, the one that begins  
14 Anton's statement and in particular towards the  
15 bottom of that paragraph, although certainly you  
16 can look at the paragraph to refresh your  
17 recollection, but I'm interested in what of sort  
18 of ends the paragraph, the sentence that begins,  
19 "there remains scope for debate over whether or  
20 not the levels of technical maturity of some of  
21 the projects are adequate for them to be counted  
22 as proved reserves and further work is desirable  
23 to the extent which expectation forecasts need  
24 to be discounted to support group undeveloped  
25 volumes."

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1 JOHN RICHARD PAY

2 Do you recall what the debate was  
3 at this time that's being referred to?

4 A. I'm not aware of an actual debate  
5 going on. If you're drawing attention to this  
6 specific word on the page.

7 Q. Was there an effort to look at the  
8 technical maturity of some of the projects at  
9 SPDC at or about this time?

10 A. That's what I understood the  
11 Kluesner project to be doing.

12 Q. And why was there an emphasis on  
13 looking at the technical maturity of some of the  
14 projects at SPDC?

15 A. Well, my understanding that that  
16 was a key part of the study conducted by  
17 Mr. Kluesner and his team was to review the full

18 scope of not only proved reserves, but all  
19 categories of reserves and scope recovery  
20 efforts and to, shall we say investigate the  
21 degree of maturity, the firmness of each of the  
22 projects underpinning the volumes that we had in  
23 the inventory for Nigeria.

24 Q. Now, prior to this time had such a  
25 study or analysis been conducted at SPDC?

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1 JOHN RICHARD PAY

2 A. I don't know if it had or not.

3 Q. In the about nine months or so in  
4 your position as group reserves coordinator had  
5 you directed anyone to conduct such an analysis  
6 or study?

7 MR. TUTTLE: I'm sorry, other than  
8 the Kluesner study?

9 BY MR. HABER:

10 Q. Yes. Other than the Kluesner  
11 study, yes?

12 A. No.

13 Q. Who initiated the Kluesner study?

14 A. That I can't remember. I'm pretty  
15 sure I didn't initiate it. Precisely how I came  
16 to hear that it was planned, also I can't  
17 recall, but I know that I was very supportive of  
18 it in terms of -- that it would be a good step  
19 in underpinning the audit trail, as we referred  
20 to it yesterday, for the Nigeria inventory.

21 Q. Do you know if Mr. Barendregt had  
22 audited SPDC before February 2003?

23 A. I believe his previous audit was  
24 some years before, some time before 2003.

25 Q. Do you know when?

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1 JOHN RICHARD PAY

2 A. I think it was 1999 and another  
3 audit was due in 2003.

4 Q. Did you ever form an opinion of  
5 whether it was appropriate to have such a long  
6 period of time between audits by the group  
7 reserves auditor?

8 MR. TUTTLE: Objection to form.

9 THE WITNESS: Prior to project

10 Rockford since that was the established practice  
11 I did not object or -- I didn't form any other  
12 opinion to it other than being supportive of it  
13 as a business control.

14 BY MR. HABER:

15 Q. So you never questioned whether it  
16 was appropriate to space out the audits or have  
17 them more frequent?

18 MR. TUTTLE: Objection to form.

19 THE WITNESS: No, I don't think  
20 so.

21 BY MR. HABER:

22 Q. Looking again at Exhibit 11. If  
23 you look at the second page of the document --  
24 by the way, who is Ojo Sanni, if I'm pronouncing  
25 that correctly?

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1 JOHN RICHARD PAY

2 A. Yes. At the time he was my  
3 contact point, my focal point for reserves  
4 matters in SPDC.

5 Q. If you could just take a look for  
6 a moment on the first page at his reference  
7 indicator. What is the D-P-E-N-R-E-S stand for,  
8 if you know?

9 A. I don't know.

10 Q. Looking at the second page now.  
11 The first paragraph of the e-mail from you to  
12 Mr. Sanni, which is dated January 20, 2003, you  
13 say, "a couple weeks ago we asked SPDC to  
14 provide additional information on the  
15 relationship between proved reserves,  
16 expectation reserves and the business plan  
17 forecast. So far this information has not been  
18 forthcoming."

19 During your time as GRC did you  
20 find that SPDC was not responsive to requests  
21 for information?

22 MR. TUTTLE: Objection.

23 MR. HABER: You can answer.

24 THE WITNESS: My experience it was  
25 generally difficult to get questions of this

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1 JOHN RICHARD PAY

2 nature answered.

3 BY MR. HABER:

4 Q. Did you ever talk with any of your  
5 predecessors to see if they had similar  
6 experiences in obtaining information?

7 A. No, I don't recall such  
8 discussions.

9 Q. Why did you seek this information  
10 from SPDC?

11 A. It was in -- may I just take some  
12 time?

13 Q. Please.

14 A. Mr. Barendregt had relayed an  
15 e-mail to me, sent an e-mail to me on the 7th of  
16 January which is in this pack in which he is  
17 suggesting that I require of three OUs,  
18 operating units, information on the relationship  
19 between the reserves that are booked and the  
20 production forecast for those companies. And  
21 my -- that is the context in which this e-mail  
22 discussion is occurring.

23 Q. Do you have an understanding of  
24 why Mr. Barendregt needed the information that  
25 he requests in that e-mail?

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1 JOHN RICHARD PAY

2 A. What my understanding was is that  
3 it was as part of his procedures to verify the  
4 reports of the individual OUs concerned at the  
5 end of 2002.

6 Q. So this was in connection with his  
7 function in the ARPR process that we had  
8 discussed yesterday?

9 A. Correct.

10 Q. Now, if you look down at the next  
11 e-mail, which is dated January 7, 2003, from you  
12 to Mr. Sanni with a cc to Mr. Barendregt,  
13 looking at the second paragraph it says, "whilst  
14 the issue of 2019 license expiry has largely  
15 been resolved now, we still need to be able to  
16 check the consistency of SPDC's proved reserves

17 and projection profiles against the approved  
18 corporate business plan in view of the  
19 continuing influence of OPEC quota and  
20 constraints."

21 What were you referring to with  
22 regard to the influence of OPEC quota  
23 constraints?

24 A. Well, Nigeria is a member of OPEC  
25 and as such is subject to OPEC production quotas  
0362

1 JOHN RICHARD PAY  
2 and therefore by being situated in Nigeria so is  
3 SPDC. There is only a share of the production  
4 that is available to the various companies  
5 operating that. In aggregates they can only  
6 produce up to the quota that's been assigned to  
7 Nigeria.

8 Now, in order to produce the  
9 proved reserves that SPDC had registered before  
10 the 2019 license expiry, SPDC would have had to  
11 significantly increase their production rate.  
12 The business plan showed this is what they  
13 expected to do and I had previously inquired and  
14 I think previously mentioned that I made some  
15 inquiries with them in relation to the  
16 production gross that they expected and it's the  
17 degree of certainty they had over whether it  
18 would actually occur. And also I had made  
19 inquiries as to whether it would be possible for  
20 that production growth to occur given that the  
21 country and therefore SPDC itself would be  
22 subject to quotas. The answer I had received  
23 from them from SPDC on that issue was that the  
24 production growth included or took cognizance of  
25 the effect of the OPEC quota, so it was not an

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1 JOHN RICHARD PAY  
2 unconstrained growth, it acknowledged a plan  
3 that would still adhere to the OPEC quota.

4 So that had allayed my questions  
5 that I had over the quota constraints, but still  
6 it's a significant item -- it's a significant  
7 element of the business in Nigeria and therefore

8 I wished to see that SPDC could produce a  
9 production forecast which address both the  
10 proved reserves they had on their books and the  
11 expectation reserves which generally is a higher  
12 figure, taking into account whatever influence  
13 of OPEC constraints there would be.

14 Q. Now, did you form an opinion of  
15 whether SPDC could attain the production  
16 forecasts that it had included in its business  
17 plan?

18 MR. TUTTLE: Ever -- is there a  
19 time period.

20 BY MR. HABER:

21 Q. During this time period?

22 MR. TUTTLE: He covers two years  
23 or two different business plans.

24 MR. HABER: We're talking right  
25 now in January 2003.

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1 JOHN RICHARD PAY

2 MR. TUTTLE: Okay.

3 THE WITNESS: The business plan  
4 current would be the one prepared in 2002, which  
5 is --

6 BY MR. HABER:

7 Q. Correct.

8 A. The one that I had asked questions  
9 of SPDC about?

10 Q. That's correct.

11 A. It's not my place to approve or  
12 disapprove their business plan, but the  
13 questions I asked of SPDC in relation to the  
14 production growth contained in that business  
15 plan was such the answers clearly indicated to  
16 me the people working in SPDC clearly believed  
17 and stood by their business plan and quoted  
18 specific projects which they stated would  
19 contribute to the production growth.

20 Q. I'm not asking what they believed,  
21 I'm asking what you believed. Did you believe  
22 what they were telling you was attainable?

23 A. Based on the information I had  
24 available, I had no reason to doubt what they

25 were saying.

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1 JOHN RICHARD PAY

2 Q. Well, among the pieces of  
3 information that was available to you, had you  
4 ever seen historical data showing SPDC's annual  
5 production?

6 MR. TUTTLE: Objection,  
7 argumentative. Excuse me.

8 THE WITNESS: Yes.

9 BY MR. HABER:

10 Q. Yes?

11 A. Yes, I had.

12 Q. Okay. And did that data also show  
13 SPDC's production, actual production against  
14 forecasts?

15 A. Yes. They had a history of  
16 showing in their business plans growth and  
17 production which had not materialized.  
18 Therefore, I was skeptical when the next  
19 business plan continues to show that which is  
20 why I asked the questions. However, in view of  
21 the responses to those questions it is true to  
22 say I still remained a little skeptical but less  
23 skeptical than I had been before I asked the  
24 questions.

25 Q. Do you know if one of the items

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1 JOHN RICHARD PAY

2 that the Kluesner team was to look at was the  
3 ability of SPDC to attain the production targets  
4 in the business plan?

5 A. I'm not today aware of that being  
6 on their terms of reference.

7 Q. Other than the Kluesner team, do  
8 you know if there was any other study conducted  
9 by anyone within Shell to determine -- let me  
10 rephrase that.

11 Other than the Kluesner study team  
12 and other than SPDC, do you know if there was  
13 any study conducted by anyone within Shell to  
14 determine whether the production forecasts in  
15 SPDC's business plan were attainable?



16 A. I'm not aware of any such study  
17 nor would I imagine anyone outside SPDC would be  
18 capable of doing such a study in the required  
19 level of detail.

20 Q. Did you ever ask for such a study?

21 A. Not that I recall.

22 MR. TUTTLE: Objection.

23 BY MR. HABER:

24 Q. Do you recall what the production  
25 growth rate that was targeted in SPDC's business

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1 JOHN RICHARD PAY

2 plan was?

3 A. In terms of barrels per day?

4 Q. Yes.

5 A. Actually, no. I know the shape of  
6 the picture, but I can't remember specifically  
7 the numbers on it.

8 Q. How about in terms of percentage?  
9 Do you know what percentage growth rate SPDC was  
10 forecasting?

11 A. Well, by growth rate, you mean the  
12 change in production level that would be  
13 required?

14 Q. Yes.

15 A. I believe it was -- I believe it  
16 was 70 percent. That's the figure I have.

17 Q. 70 or 17?

18 A. 70, compared with the 2001  
19 production rate.

20 Q. Looking at the exhibit, again 11,  
21 I think we're on. Yeah, Exhibit 11. The  
22 paragraph that I --

23 A. The picture is here, actually.

24 Q. Oh, it is. All right. When you  
25 say the picture, are you referring to the graph

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1 JOHN RICHARD PAY

2 on page 130585?

3 A. Yes.

4 Q. And what does this show?

5 A. This is -- this is showing the  
6 historical production rate of oil in SPDC from

7 1990 to 2000 and the forecast of production for  
8 years thereafter until 2019, which at the time  
9 was considered to be -- well, the license expiry  
10 date of the license is concerned.

11 Q. And the historical, the 1990  
12 through 2000, shows that production is less than  
13 what's being forecasted. Am I reading that  
14 correctly?

15 A. Yes.

16 Q. This part of the e-mail chain  
17 which reads recent history of proved reserves  
18 booking, do you know who prepared this document?

19 A. No, I don't.

20 Q. Who is Mark Corner?

21 A. At the time I understood him to be  
22 the supervisor of Mr. Hoppe.

23 Q. Now, on page 130582, which is the  
24 second page of the document, the first part of  
25 the paragraph that we were talking about talks

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1 JOHN RICHARD PAY  
2 about the issue of 2019 license expiry being  
3 largely resolved?

4 A. Yes.

5 Q. What does that refer to?

6 A. Well, the graph we were just  
7 looking at a minute ago helps to illustrate the  
8 amount by which production rates in SPDC would  
9 need to increase if the proved reserves that  
10 they had on the books would be produced before  
11 the license expiry in 2019. In view of the fact  
12 that production in previous years had not grown,  
13 this was raising concerns that it might not, as  
14 we've been discussing, be possible for SPDC to  
15 produce those volumes before 2019. The reason  
16 2019 was seen as a significant date was that the  
17 licenses, production licenses on shore expire in  
18 that year and my recollection is that there had  
19 been the perception it would not be possible to  
20 consider any production that SPDC might make  
21 beyond that date as qualifying for proved  
22 reserves since there would be no production  
23 license.

24 However, towards the end of 2002,

25 I or primarily -- I think it's another

0370

1 JOHN RICHARD PAY

2 Mr. Klusener actually.

3 Q. Kluesner?

4 A. Klusener, legal -- working in the  
5 legal department in SPDC itself, together with  
6 him investigated whether or not 2019 was  
7 generally a constraint given the SEC rules, the  
8 way I understood them at the time, would allow  
9 for the extension of licenses where it was  
10 certain that such licenses could be -- would be  
11 extended with reference to past practice, et  
12 cetera.

13 I believe Mr. Klusener  
14 commissioned a study from SPDC's own external  
15 legal counsel which gave an opinion on the  
16 matter that was quite strongly in favor of SPDC,  
17 in fact, having a right that could be exercised  
18 under Nigerian law to extend the licenses and  
19 therefore 2019 in itself actually was not a  
20 constraint on the forward time frame over which  
21 Nigeria could consider its production profile  
22 and reserves estimate.

23 Q. Now --

24 A. Sorry. This is what is meant by  
25 the issue is resolved.

0371

1 JOHN RICHARD PAY

2 Q. In connection with the analysis,  
3 the legal analysis of the license expiry issue,  
4 do you recall outside counsel in the United  
5 States being contacted?

6 A. I can't recall whether or not they  
7 were.

8 Q. Do you recall hearing the name of  
9 a law firm by the name of Cravath Swaine &  
10 Moore?

11 A. I'm aware of that name. I've  
12 heard it, yes.

13 Q. Do you recall hearing it in  
14 connection with the license expiry issue you've

15 just discussed?

16 MR. TUTTLE: Objection,  
17 foundation.

18 THE WITNESS: I'm not 100 percent  
19 certain, but it may be that somebody had made  
20 the suggestion to -- I don't know. Possibly.

21 BY MR. HABER:

22 Q. Do you know who Bud Rogers is?

23 A. I came to know Bud Rogers only in  
24 connection with project Rockford.

25 Q. Do you know who a Rory Milson is?

0372

1 JOHN RICHARD PAY

2 A. Never heard of him.

3 MR. TUTTLE: Is this a good time  
4 to take a break?

5 MR. HABER: Okay.

6 THE VIDEOGRAPHER: We are going  
7 off the record. The time is 2:28 p.m.

8 (A brief recess was taken.)

9 THE VIDEOGRAPHER: We're back on  
10 the record. The time is 2:51 p.m.

11 (Pay Exhibit Number 12 was marked  
12 for identification.)

13 BY MR. HABER:

14 Q. During the break we marked as  
15 three exhibits, documents relating to the SPDC  
16 license expiry issue. The first exhibit which  
17 has been marked as Pay Exhibit 12 is a series of  
18 e-mails with an attachment, the last of which is  
19 from Steve Ratcliffe dated January 8th, 2003 to  
20 Mark Corner. The subject is reserves. The  
21 Bates number, and there are two of them, is V  
22 00130033 through V 00130039 and the other Bates  
23 number is Corner 00032 through Corner 00038.

24 (Pay Exhibit Number 13 was marked  
25 for identification.)

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1 JOHN RICHARD PAY

2 BY MR. HABER:

3 We marked as Pay Exhibit 13 an  
4 e-mail with an attachment. This e-mail is from  
5 Johannes Van Poppel to William Rogers, the date

6 is February 3, 2003, and there's a cc to Peter  
7 Folmer and the subject line reads urgent advice  
8 requested on SEC regulations. The Bates number  
9 for this document and attachment is LON 01540333  
10 through LON 01540337.

11 (Pay Exhibit Number 14 was marked  
12 for identification.)

13 BY MR. HABER:

14 The final document that we marked  
15 as an exhibit is Pay Exhibit 14 which is in an  
16 e-mail that attaches three documents. The  
17 e-mail is from Mr. Pay, it's dated February 4,  
18 2003, it's to Andrew Hooks Klusener with a cc to  
19 Phil Davis and Malcolm Harper. The subject line  
20 reads Nigeria oil/mining leases. Again, there  
21 are two Bates ranges on this document. The  
22 first is V 00372200 through V 00372210 and  
23 Harper 0120 through Harper 0130.

24 My first question to you, if  
25 you've had an opportunity to look at these  
0374

1 JOHN RICHARD PAY  
2 documents?

3 A. Not in detail, but I've browsed  
4 through them.

5 Q. Have you seen prior to today the  
6 documents that we've just marked as Exhibit 12,  
7 13, and 14?

8 MR. TUTTLE: Can we take them one  
9 at a time?

10 MR. HABER: We can.

11 BY MR. HABER:

12 Q. Have you seen what we've marked as  
13 Pay Exhibit 12 before today?

14 A. I'm not sure that I've seen it in  
15 total. Much of it is an e-mail chain in which  
16 I'm not copied, although I do have a -- there is  
17 an e-mail from me included within it,  
18 apparently.

19 Q. You notice that you're included on  
20 the ccs beginning on the second -- I'm sorry, on  
21 the first page of the exhibit, the e-mail from  
22 Mr. Klusener to Mr. Ratcliffe?

23 A. Yeah.

24 Q. While we're looking at this  
25 document, if you look at the second page of the  
0375

1 JOHN RICHARD PAY  
2 e-mail it says 2 of 3 in the upper right-hand  
3 corner, this is an e-mail from Mr. Klusener to  
4 Guy Cowan or G. Cowan. Who is Mr. Cowan?

5 A. I'm not sure I know.

6 Q. Who is Ron Van Den Berg?

7 A. Well, his reference indicator  
8 tells me he was the managing director of SPDC at  
9 the time.

10 Q. Had you ever had any interaction  
11 with Mr. Van Den Berg while you were group  
12 reserves coordinator, prior to December 2002?

13 A. Not that I recall.

14 Q. If you look at the e-mail it says,  
15 "John Pay is going to run this through the  
16 reserves auditors before year end but they have  
17 been kept on board all along, as I understand  
18 it."

19 Do you have an understanding of  
20 what reference Mr. Klusener is making here?

21 A. Does it not speak for itself?

22 There's correspondence here  
23 relating to the expiry of licenses in Nigeria  
24 and this is a statement that I'm going to seek  
25 guidance, so check with the reserves auditors on  
0376

1 JOHN RICHARD PAY  
2 the issue.

3 Q. Just so you understand, it was the  
4 word this. I wanted to make sure I knew what  
5 the word this referred to?

6 A. Okay.

7 MR. FERRARA: I'm sorry. I lost  
8 the question.

9 MR. HABER: He mentioned generally  
10 I thought the reference was to the SEC defense  
11 letter. What I'm trying to understand what his  
12 understanding was at the time.

13 MR. FERRARA: What page of the

14 document?

15 MR. HABER: This on page 2 of 3,  
16 if you look in the right-hand corner. It says,  
17 "John Pay is going to run this through the  
18 reserves auditors."

19 THE WITNESS: Yes, the  
20 correspondence appears to be in relation to the  
21 so-called SEC defense letter, which I can  
22 explain in more detail if you wish, but the  
23 attachment to this package does not seem to be  
24 that defense letter and I'm not -- it refers to  
25 license extensions. I'm not sure the attachment

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1 JOHN RICHARD PAY  
2 is actually what is referred to in the e-mail.

3 BY MR. HABER:

4 Q. If you look at the next page, 3 of  
5 3 in the upper left -- withdrawn. Sorry.

6 If you look at the next page  
7 though, page 3 of 3, does this look like a draft  
8 of a defense letter?

9 MR. TUTTLE: The text that's on 3  
10 of 3?

11 MR. HABER: It says, "since 1999  
12 the group has imposed," et cetera.

13 MR. TUTTLE: You can asked him if  
14 that looks like the SEC defense letter?

15 THE WITNESS: No, it doesn't. The  
16 SEC defense letter would appear to have been an  
17 attachment to this original e-mail and this  
18 suggested text for a cover note, I think, to  
19 SPDC management.

20 BY MR. HABER:

21 Q. Now, you had mentioned in a prior  
22 answer that you could explain the SEC defense  
23 letter in more detail, and I would like you to  
24 do that if you can?

25 A. The SEC defense letter is a typed

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1 JOHN RICHARD PAY  
2 letter that we prepared as if responding to a  
3 question, should it have been raised by the SEC  
4 concerning license expiry in Nigeria. So it was



5 our position, written as if it was in the form  
6 of a letter to the SEC, assuming they would  
7 asked us a question, which at that time they had  
8 not. It was felt helpful. I can't remember who  
9 suggested it. It was felt helpful to write it  
10 in those terms so that we would have documented  
11 on the shelves the activities that would be  
12 necessary, but at the same time documentary to  
13 internal views.

14 Q. Who was responsible for drafting  
15 this letter?

16 A. I was -- I wrote a lot of it. I  
17 corresponded in -- I was assisted in so doing by  
18 as I recall Mr. Klusener and Mr. Hooks.

19 Q. Who is Andrew Hooks?

20 A. To be perfectly honest I don't  
21 know what his exact job title was, but he was  
22 identified to me and was very active in terms of  
23 providing advice and guidance on the issue of  
24 license, license expiry, license renewal in  
25 Nigeria.

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1 JOHN RICHARD PAY

2 Q. Now, if you look at Exhibit 14,  
3 which is the e-mail from you to Mr. Hooks and  
4 Mr. Klusener, with the cc to Phil Davis and  
5 Malcolm Harper, it has three attachments. Have  
6 you seen this document before?

7 A. Evidently I must have done.  
8 However, until you refreshed my memory of it I  
9 didn't recall. You asked me a question earlier  
10 about whether Cravath's opinion was sought.  
11 Evidently it was. I'm sorry, I didn't remember  
12 that.

13 Q. It's okay. If you look at  
14 Exhibit 13 for a moment. I know that your name  
15 does not appear on the e-mail from Mr. Van  
16 Poppel to Mr. Rogers, but I'm just wondering if  
17 you have ever seen this document in connection  
18 with your work involving the license expiry and  
19 SPDC?

20 A. I'm not sure that I have.

21 Q. Do you recall having any

22 discussions with William Rogers or Bud Rogers,  
23 as he's known?

24 MR. TUTTLE: Other than what he  
25 testified before in project Rockford?

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1 JOHN RICHARD PAY

2 MR. HABER: Correct. Well now in  
3 the context --

4 MR. TUTTLE: Of this. Your  
5 question was open ended on that point.

6 MR. HABER: Okay.

7 THE WITNESS: Since I had  
8 forgotten the fact that Cravath was consulted my  
9 memory has not been jogged whether or not I  
10 spoke to Mr. Rogers. I don't believe that I  
11 did.

12 BY MR. HABER:

13 Q. If you go to Exhibit 14 for a  
14 moment, and if you turn the page again to the  
15 second e-mail on that page. And I again  
16 recognized that your name is not on it, but it's  
17 an e-mail from Mr. Rogers to Mr. Van Poppel and  
18 I believe it's a cc to a C. Taylor at Cravath.  
19 Does a Mr. or Ms. Taylor refresh your  
20 recollection about someone you may have  
21 interacted with at Cravath at this time?

22 A. No.

23 Q. Now, while we're still on  
24 Exhibit 14, if you can turn to Harper 0124 and  
25 the pages that follow. Is this a draft of the

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1 JOHN RICHARD PAY

2 SEC defense letter that you were talking about?

3 A. Yes.

4 Q. Do you recall discussing the work  
5 that was done with regard to the license expiry  
6 issue in SPDC with Mr. Van der Vijver?

7 A. No, I don't recall any particular  
8 involvement of Mr. Van der Vijver in this work.

9 Q. How about involvement by  
10 Mr. Coopman?

11 A. I'm sorry. I don't remember.

12 Q. You can put these aside.

13 Now, in talking about the Kluesner

14 review. Do you recall when the term of  
15 reference was executed?

16 A. The work proceeded in phases or  
17 had been planned to proceed in phases. I  
18 believe the original terms of reference for the  
19 first phase were concluded, I believe, late in  
20 2002.

21 At the end of the first phase,  
22 which I understand to have been principally a  
23 data gathering phase, there was a term of  
24 reference set for a more detailed review, the  
25 second phase, and my recollection that was early

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1 JOHN RICHARD PAY

2 in 2003, in the first quarter or so,  
3 approximately.

4 Q. Did you have any discussions with  
5 Mr. Kluesner about the results of -- let's start  
6 with the phase one aspect of the study?

7 A. I think I might have discussed the  
8 phase 1 results with Mr. Kluesner early in 2003,  
9 but my recollection most of the discussion  
10 around that work was with Mr. Hoppe.

11 Q. When do you recall talking with  
12 Mr. Hoppe about this study?

13 A. At various times, particularly  
14 through the year 2003.

15 Q. Do you recall the sum and  
16 substance of those discussions?

17 A. As I believe I've already  
18 mentioned, as part of the work there was an  
19 endeavor to substantiate the audit trail behind  
20 various aspects of SPDCs resource inventory,  
21 including proved reserves.

22 Throughout the majority of 2003 up  
23 until on or around November 14th the substance  
24 of the information I was given by Mr. Hoppe was,  
25 as I've said before, that certain elements of

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1 JOHN RICHARD PAY

2 the portfolio appeared to lack the requisite  
3 audit trail, but that -- which would lead to

4 potentially debooking, whereas other elements  
5 had been identified which would be capable of  
6 being booked as new reserves additions, thereby  
7 canceling to a large extent the debookings that  
8 may be necessary.

9 Q. Now, when you're referring to the  
10 November 14th time frame are you referring now  
11 to the second phase of the study?

12 A. Yes. At around that time the  
13 second phase had been completed or substantially  
14 completed such that as I recall it the proved  
15 reserves inventory of SPDC had been categorized  
16 into or subdivided into a number of categories  
17 according to the relative strength, if you like,  
18 of the audit trail.

19 Now, at around that time or  
20 sometime before there had been a discussion with  
21 Mr. Barendregt who had been planning to make an  
22 audit of the SPDC inventory in 2003, but due to  
23 ill health was unable to travel to Nigeria.

24 And so I think sometime before  
25 November 2003 a team from SPDC had visited  
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1 JOHN RICHARD PAY

2 Mr. Barendregt to seek guidance, if  
3 Mr. Barendregt would have any, in terms of input  
4 to phase 3 of the study which was as I recall  
5 intended to look at ways in which the audit  
6 trail would need to be substantiated and  
7 established.

8 It was -- so the discussion I had  
9 prior -- the information that was available to  
10 me immediately prior to November was the  
11 categorization of those proved reserves and it  
12 was, I think, part of the fallout from the  
13 discussion with Mr. Barendregt and subsequently  
14 information received in the middle of November  
15 that indicated whilst we had clarity now on the  
16 status of the proved reserves through the  
17 categorizations indicated, the possibility to  
18 offset with debookings by new additions was  
19 found not to be there.

20 Q. And that was found as part of the

21 phase 2 aspect of the study?

22 A. I think it was -- my recollection  
23 is it was in the context of assessing the  
24 results of phase 2 and setting a work path for  
25 phase 3.

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1 JOHN RICHARD PAY

2 Q. Do you know if the results of the  
3 phase 2 study were presented to the ExCom?

4 A. No.

5 Q. Do you know if the results of the  
6 phase 2 study were presented to the CMD?

7 A. No.

8 Q. Do you know if the results of the  
9 phase 2 study were presented to Walter van der  
10 Vijver?

11 A. No.

12 Q. Do you know if the results were --  
13 of the phase 2 study were presented to  
14 Mr. Barendregt?

15 A. My understanding is that the  
16 information that was available at the time that  
17 the SPDC delegation met Mr. Barendregt, that  
18 information included a summary of the then  
19 results of the study.

20 Q. Now, at the time the phase 2 study  
21 had pretty much concluded and the results  
22 communicated had Mr. Barendregt conducted his  
23 audit of SPDC?

24 MR. ADLER: Objection.

25 THE WITNESS: Well, as I think

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1 JOHN RICHARD PAY

2 I've already said, it was not a full audit of  
3 SPDC so, no, he had not conducted an audit of  
4 SPDC.

5 BY MR. HABER:

6 Q. Do you know if Mr. Barendregt had  
7 conducted a full audit of SPDC in 2003?

8 A. My understanding is he didn't.

9 Q. And the reason he didn't --  
10 withdrawn.

11 Do you have an understanding of

12 why he did not conduct a full audit?

13 A. I believe I'm on record as saying  
14 he was too ill to travel and, therefore, the  
15 full audit had to be postponed but was  
16 substituted in the meantime by a visit from  
17 personnel from SPDC to visit him in Holland to  
18 discuss reserves issues as part of which the  
19 Kluesner study results were discussed primarily  
20 with a view to seeking his guidance as to what  
21 additional work he would consider appropriate to  
22 be done between when he met them and the end of  
23 the year in order, if possible, to substantiate  
24 reserves bookings by the end of the year.

25 Q. Do you know who the personnel from  
0387

1 JOHN RICHARD PAY  
2 SPDC were that visited him in Holland to discuss  
3 the reserves?

4 A. I can't remember who they were.

5 Q. Before I pass out that document,  
6 one other follow-up question on the phase 2  
7 results.

8 Do you recall having a telephone  
9 conversation with David Kluesner towards the end  
10 of November 2003 to discuss this study?

11 A. No, I don't.

12 MR. HABER: Okay.

13 (Pay Exhibit Number 15 was marked  
14 for identification.)

15 BY MR. HABER:

16 Q. I'm marking as Pay Exhibit 15 the  
17 proved reserves process audit, SPDC Nigeria,  
18 dated 18-19 September 2003. The note in the  
19 upper left-hand corner reads, 30 September 2003  
20 is from Anton Barendregt. Its Bates numbers are  
21 V00211034 through V00211043. And there's  
22 another range of DB 018009 through DB 018018.

23 I ask you as you're looking this  
24 over to -- the first question I'm going to ask  
25 you is if you recall seeing this document before  
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1 JOHN RICHARD PAY  
2 today?

3 A. Yes, I do.

4 Q. And, in fact, you are on the  
5 circulation distribution list; correct?

6 A. Yes.

7 Q. And the Hans Bakker that is also  
8 listed as being from EPS-P. That was your boss  
9 at that time?

10 A. Yes. He was the successor to  
11 Mr. Nauta.

12 Q. Okay. Had you seen a draft of  
13 this audit report before the distribution to the  
14 larger number of recipients?

15 A. I can't remember whether I did or  
16 not.

17 Q. Do you recall if Mr. Barendregt  
18 had provided you with copies of his audit  
19 reports before they were finalized?

20 MR. TUTTLE: In general?

21 BY MR. HABER:

22 Q. Yes. During your tenure as group  
23 reserves coordinator?

24 A. I seem to recall that, yes, it  
25 would be normal for me to receive an advance

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1 JOHN RICHARD PAY

2 copy just to correct any factual errors, but  
3 that's only for that purpose.

4 Q. Do you recall any instances where  
5 you provided a challenge to his conclusions?

6 A. No, I don't. I didn't feel,  
7 unless there was misrepresentation of something,  
8 I was qualified to comment on then it wasn't my  
9 place to comment.

10 Q. If you look down to the second to  
11 last paragraph Mr. Barendregt gives a grade, if  
12 you will, for his audit finding. And what he  
13 says is, "the audit finding is therefore that  
14 the present status of SPDC's proved oil reserves  
15 is unsatisfactory." Do you see that?

16 A. Yes.

17 Q. Do you recall if in the prior  
18 audit of SPDC Mr. Barendregt had given a  
19 satisfactory report?



20 A. I don't know if he had. I recall  
21 that the one immediately prior to this -- well,  
22 in 1999 was also unsatisfactory.

23 Q. Do you recall the 1999 audit  
24 report was unsatisfactory?

25 A. If it was '99 or 2000, whenever it  
0390

1 JOHN RICHARD PAY  
2 was.

3 Q. What was your reaction when you  
4 reviewed this report?

5 A. I don't recall any particular  
6 reaction. It was consistent with what I was  
7 going to understand from in particular the  
8 Kluesner study at the time.

9 Q. Do you know how Mr. -- withdrawn.  
10 Do you know if the results of this  
11 report were provided to Mr. Van der Vijver?

12 A. At the time that the report was  
13 issued I believe they were not. They were,  
14 however, provided to him later.

15 Q. Do you recall when?

16 A. I believe shortly after the start  
17 of project Rockford.

18 Q. When did project Rockford start?

19 A. I'm not sure there was an exact  
20 date. I was aware that activity was ongoing  
21 upon my return from leave on or around the 25th  
22 of November 2003.

23 (Pay Exhibit Number 16 was marked  
24 for identification.)

25 BY MR. HABER:

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1 JOHN RICHARD PAY

2 Q. We've just marked as Pay  
3 Exhibit 16 a string of e-mails, the last of  
4 which is from Mr. Van der Vijver, it's dated  
5 November 23, 2003, to John Pay, with a cc to  
6 John Bell and Frank Coopman. Subject line reads  
7 2003 RRR review. The Bates range is V00090852  
8 through V00090854. There's also another Bates  
9 range of TT 000695 through TT 000697.

10 Have you seen this e-mail

11 correspondence before today?

12 A. This is the -- yes. This is the  
13 manner in which I provided those audit reports  
14 to Mr. Van der Vijver, the second e-mail.

15 Q. So the second e-mail being the one  
16 from you to Mr. Van der Vijver dated  
17 November 17, 2003?

18 A. Correct.

19 Q. And if you look at the content of  
20 that e-mail you state that the SPDC report, the  
21 audit in 1999 got a satisfactory report?

22 A. I misremembered in my recent  
23 answer to the previous question.

24 Q. There's also a reference to a good  
25 report with regard to Oman?

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1 JOHN RICHARD PAY

2 A. Correct.

3 Q. Do you recall Mr. Barendregt doing  
4 an audit of Oman in 2003?

5 A. Yes.

6 Q. And do you recall what the result  
7 of that audit was?

8 A. Unsatisfactory.

9 Q. If you look at Mr. Van der  
10 Vijver's e-mail of November 23rd to you he says  
11 -- and I'm looking at the bottom now after the  
12 bullet points, the hyphenated points he says, "I  
13 still find it amazing to compare the '99 and the  
14 '03 audit write-ups for Nigeria and Oman." Do  
15 you see that?

16 A. Yes.

17 Q. Do you recall having any  
18 communications with Mr. Van der Vijver where you  
19 discussed the reports for Oman and SPDC with him  
20 and the discussion involved a comparison of the  
21 prior reports and the reports in 2003?

22 MR. TUTTLE: Objection to form.

23 BY MR. HABER:

24 Q. You can answer.

25 A. No, I don't. This e-mail was

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1 JOHN RICHARD PAY

2 written while I was on leave and so I didn't  
3 read it at the time it was sent. By the time I  
4 returned from leave, as I recall on or around  
5 the 25th of November, Mr. Coopman had already  
6 set in his mind that a debooking would be  
7 necessary, leading -- that was effectively  
8 project Rockford. I don't recall then having a  
9 discussion with Mr. Van der Vijver on the audit  
10 reports.

11 Q. Do you recall having a discussion  
12 with Mr. Coopman? And I take it this may be in  
13 the context of what started project Rockford,  
14 again on this issue of the reports?

15 MR. TUTTLE: Object to form. Can  
16 we just get that back one more time, because I'm  
17 not sure I followed that.

18 BY MR. HABER:

19 Q. Okay. All I want to know is you  
20 said you don't recall having the conversation  
21 with Mr. Van der Vijver when you were on leave.  
22 When you came back did you have a conversation  
23 about the audit reports for Oman and SPDC with  
24 Mr. Coopman?

25 A. Since it was the audit reports and  
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1 JOHN RICHARD PAY  
2 the ancillary information that was coming in,  
3 especially from SPDC that had caused those to  
4 come to the conclusion that a recategorization  
5 would be necessary, yes, I had discussion with  
6 Mr. Coopman. Whether I discussed in detail  
7 these particular reports, I can't recall.

8 Q. Do you recall any discussions with  
9 Mr. Coopman at this time, November/December,  
10 time frame where Mr. Barendregt's ability to  
11 conduct the audits was called into question?

12 MR. TUTTLE: Object to form.

13 THE WITNESS: No, I don't.

14 BY MR. HABER:

15 Q. Do you recall any discussion with  
16 Mr. Coopman where Mr. Barendregt's judgment as a  
17 reserves auditor was questioned?

18 MR. TUTTLE: Object to form,

19 foundation.

20 THE WITNESS: No.

21 BY MR. HABER:

22 Q. Do you recall any discussion with  
23 Mr. Van der Vijver at or about this time where  
24 Mr. Barendregt's judgment as a reserves auditor  
25 was questioned?

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1 JOHN RICHARD PAY

2 MR. TUTTLE: Same objection.

3 THE WITNESS: Actually, no.

4 BY MR. HABER:

5 Q. If you look at the next part of  
6 that sentence that we were just talking about it  
7 says, "We better categorize the differences to  
8 have a logical explanation." Do you know who  
9 was tasked with that?

10 MR. TUTTLE: Object to form,  
11 foundation.

12 BY MR. HABER:

13 Q. That project?

14 MR. TUTTLE: Sorry. I was waiting  
15 for the end.

16 THE WITNESS: My recollection is  
17 that each individual item specified here by  
18 Mr. Van der Vijver was not specifically  
19 allocated to any particular person. Mr. Coopman  
20 and I principally prepared a response to this  
21 e-mail. I'm not sure it actually addressed each  
22 individual item that Mr. Van der Vijver talks  
23 about here and I don't recall that sentence that  
24 you referred to being addressed specifically in  
25 that reply.

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1 JOHN RICHARD PAY

2 BY MR. HABER:

3 Q. Do you know to whom a logical  
4 explanation would have to be made?

5 MR. TUTTLE: Object to form, calls  
6 for speculation.

7 THE WITNESS: Indeed you would  
8 have to ask Mr. Van der Vijver, I think.

9 BY MR. HABER:

10 Q. I was wondering if you had an  
11 understanding as to whom he was referring?

12 A. No, other than a logical  
13 explanation would be required for a number of  
14 purposes I can imagine.

15 MR. HABER: We have to change the  
16 tape but while we're doing that I'm going to  
17 mark another exhibit.

18 THE VIDEOGRAPHER: This marks the  
19 end of tape two, Volume II in the deposition of  
20 Mr. Pay. We're going off the record. The time  
21 is 3:30 p.m.

22 (A brief recess was taken.)

23 THE VIDEOGRAPHER: This marks the  
24 beginning of tape three, Volume II in the  
25 deposition of Mr. Pay. We are back on the

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1 JOHN RICHARD PAY

2 record. The time is 3:47 p.m.

3 (Pay Exhibit Number 17 was marked  
4 for identification.)

5 BY MR. HABER:

6 Q. We've just marked as Pay  
7 Exhibit 17 the SEC Proved Reserves Audit for PDO  
8 Oman which was conducted on October 25th through  
9 28, 2003. The note is dated in the upper  
10 left-hand corner, November 29, 2003.

11 There are two Bates ranges on this  
12 document. The first is V00102442 through  
13 V00102456. The second range is OM 000590  
14 through OM 000604.

15 A. Yes.

16 Q. Mr. Pay, have you seen this report  
17 before today?

18 A. Yes.

19 Q. And, again, you are on the  
20 circulation, the distribution list; correct?

21 A. Yes.

22 Q. Do you recall being provided a  
23 draft of this report before it was formally  
24 circulated?

25 A. If formal circulation occurred on

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1 JOHN RICHARD PAY

2 the 29th of November, 2003, as seems to be  
3 indicated I'm quite sure I saw a draft of it  
4 before that date.

5 Q. Do you recall having any  
6 discussions with Barendregt about his findings?

7 A. I don't recall any particular  
8 discussion with Mr. Barendregt.

9 Q. As you see, at the bottom of the  
10 first page, PDO was given an unsatisfactory  
11 report; correct?

12 A. Correct.

13 Q. Did you have any reaction to that  
14 finding by Mr. Barendregt?

15 A. It did not surprise me.

16 Q. Why didn't it surprise you?

17 A. During the course of 2003, earlier  
18 in 2003, I believe, possibly in May, I had made  
19 a visit to Oman to better understand the basis  
20 for the reserves estimates for PDO and I had  
21 come to the conclusion that a significant  
22 portion of the PDO reserves might not be  
23 substantiated by the required level of technical  
24 and commercial maturity.

25 Q. Did anyone accompany you when you

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2 visited Oman?

3 A. No.

4 Q. Did you take any notes of your  
5 visit?

6 A. I believe I prepared a two or  
7 three page summary of my visit.

8 Q. Was that summary in a typed format  
9 or a handwritten format?

10 A. Typed. I believe it was -- I  
11 shared it with the people I had visited in Oman,  
12 after the fact.

13 Q. Who are the people that you met in  
14 Oman?

15 A. One was a Mr. Briyya, who was my  
16 reserves focal point in Oman, B-R I believe the  
17 spelling is B-R-I -- I believe the spelling is

18 B-R-I double Y A. Another was Mr. Stewart  
19 Clayton. And the third was Dave Kemshell,  
20 K-E-M-S-H-E-L-L.

21 Q. How long was this visit?

22 A. The visit at the time was, I  
23 think, two or three days.

24 Q. Did you meet anyone from the Omani  
25 government?

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1 JOHN RICHARD PAY

2 A. No.

3 Q. Did you discuss your findings with  
4 Mr. Clayton while you were in Oman?

5 MR. TUTTLE: Objection to form,  
6 foundation.

7 BY MR. HABER:

8 Q. I'll withdraw.

9 Did you make any findings during  
10 the time you were in Oman?

11 A. My recollection is that I  
12 expressed concern over the audit trail and the  
13 degree of technical and commercial maturity over  
14 some of the projects, constituting a significant  
15 proportion of the PDO proved reserves inventory.  
16 My recollection is that I recall discussing  
17 with -- sorry, repeating myself.

18 I recall discussing with the  
19 people I mentioned that I visited a suggested  
20 plan forward which was founded on plans they  
21 already had in place to address this matter.

22 Q. And what were those plans?

23 A. It was essentially in relation to  
24 studies plans in terms of field development  
25 projects and seeking to define with them a

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1 JOHN RICHARD PAY

2 process by which reserves that would not be --  
3 were not then planned to be underpinned by the  
4 requisite study and technical definition within  
5 a reasonable time frame might be reprioritized  
6 for such definition.

7 However, I would like to continue.

8 Q. Sure.



9 A. My perception was it was unlikely  
10 that such definition would be available in time  
11 for the end of the year. I knew this audit  
12 would happen, I expected the audit to confirm my  
13 views, and that is what happened.

14 Q. You mentioned study plans. Were  
15 there any study plans that were developed at the  
16 time of your visit?

17 A. I recall that PDO presented me  
18 with a five-year study plan covering all of the  
19 studies they intended to do within the next five  
20 years.

21 Q. Do you know if those study plans  
22 were prepared by PDO personnel only?

23 A. They were presented as such. I  
24 had no reason to suspect otherwise.

25 Q. Do you know if any service

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1 JOHN RICHARD PAY  
2 organization provided any assistance in the  
3 preparation of the plans?

4 A. No.

5 Q. Did you communicate the findings  
6 that you made while you were in Oman to your  
7 bosses?

8 MR. TUTTLE: Objection to form,  
9 foundation.

10 BY MR. HABER:

11 Q. You can answer.

12 A. I included an entry in the  
13 potential reserves exposure catalog indicating a  
14 possible volume that might be at risk, pending  
15 confirmation from the audit.

16 Q. Other than the potential reserves  
17 exposure catalog was there any other means of  
18 communicating the findings that you had made?

19 A. Not as I recall.

20 Q. Do you recall communicating your  
21 findings to Mr. Van der Vijver?

22 MR. TUTTLE: Objection to form,  
23 foundation.

24 THE WITNESS: No, I don't.

25 BY MR. HABER:

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1 JOHN RICHARD PAY

2 Q. If you -- if you look at Pay  
3 Exhibit 17, the paragraph, the third to last  
4 paragraph, the one that says, "the audit found  
5 that PDO's Group share." Do you see that?

6 A. Yes.

7 Q. In the middle of the paragraph  
8 towards the bottom there's a discussion of the  
9 technical maturity of the projects and then in  
10 particular it says, "PDO have recognized this  
11 and have embarked on an aggressive study program  
12 to address the maturation of the associated  
13 projects."

14 Is this the program that you just  
15 testified about or is this -- or is the  
16 reference here to some other program, if you  
17 know?

18 A. I understand it to refer to the  
19 same thing.

20 Q. Okay. As part of Rockford were  
21 reserves restated in Oman?

22 A. Yes.

23 Q. Do you recall the volume?

24 A. I believe the volume is consistent  
25 with the figures that you'll find in here,

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1 JOHN RICHARD PAY

2 roughly 400 million barrels of Shell share  
3 reserves.

4 Q. And do you recall the reasons that  
5 were attendant to the decision to restate the  
6 reserves?

7 A. The confirmation of the lack of  
8 technical maturity in relation to those volumes,  
9 as was confirmed by the audit report.

10 Q. Do you recall what it was about  
11 the technical maturity that was found to be  
12 problematic?

13 A. My recollection is principally  
14 twofold: Either the technical studies had not  
15 been progressed to the required level of  
16 maturity. In other words, the studies hadn't

17 been concluded. Or the studies were in relation  
18 to the application of enhanced recovery  
19 techniques which had yet to be proved effective,  
20 which would discount them from proved reserves  
21 attribution.

22 Q. Let's take the first issue that  
23 you identified, the technical studies had not  
24 progressed to the required level of maturity.

25 What was the required level of  
0405

1 JOHN RICHARD PAY  
2 maturity?

3 A. According to the guidelines at the  
4 time, the internal Shell guidelines on reserves  
5 estimating for major projects. And at the time  
6 major projects I believe were defined as those  
7 requiring more than \$100 million of capital  
8 expenditure and that would have applied to many  
9 of the projects concerned, according to our own  
10 guidelines must have reached VAR 3, which is a  
11 milestone in our project maturation system and  
12 they had not done so.

13 Q. Also in your answer when you're  
14 referring to technical studies had not  
15 progressed are you referring to field  
16 development plans?

17 A. Usually incremental field  
18 development plans. Many of the properties for  
19 which -- which we're discussing here are in fact  
20 fields which were in production at that time and  
21 they're in production today, but the plans  
22 specifically addressed further development of  
23 those same fields.

24 Q. So the issue was not with the  
25 portion of the fields that were actually

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1 JOHN RICHARD PAY  
2 developing, but for future?

3 A. Incremental development plans and  
4 specifications of what those plans should be.

5 Q. Now, the other part of your answer  
6 you said that the studies hadn't been concluded  
7 or the studies were in relation to the

8 application of enhanced recovery techniques

9 which yet had to be proved effective.

10 What are you referring to there?

11 A. Well, there is specific guidance  
12 in the SEC clarification of the regulation SX  
13 410 which states that improved recovery  
14 techniques must be proved effective before  
15 proved reserves can be attributed to them.

16 Q. And how are those techniques to be  
17 proved effective?

18 A. Through observation of production  
19 conformance, consistent with what had been  
20 expected.

21 Q. Do you know who within Shell was  
22 providing PDO with the enhanced recovery  
23 techniques?

24 A. To the best of my knowledge, PDO  
25 was responsible for its own definition of the

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1 JOHN RICHARD PAY

2 techniques it would use.

3 Q. Do you know if SEPTAR was  
4 providing a definition of techniques to be used?

5 MR. TUTTLE: Objection,  
6 foundation.

7 THE WITNESS: The answer is no.

8 MR. FERRARA: Sorry. The answer  
9 is, no, they were not or, no, you don't know?

10 THE WITNESS: No, I don't know.

11 BY MR. HABER:

12 Q. Do you know a person by the name  
13 of Said Al Harthy or Harthy?

14 A. I'm familiar with the name. I  
15 believe he was involved in, I believe he was  
16 involved in business planning for PDO.

17 Q. Do you recall meeting with him  
18 when you went to PDO?

19 A. I believe we met in the corridor  
20 and exchanged a few words. I don't think we had  
21 any more substantive discussion than that.

22 Q. Do you know what negative reserves  
23 are?

24 A. I'm familiar with the expression,

25 yes.

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1 JOHN RICHARD PAY

2 Q. And what is your understanding of  
3 that expression?

4 A. It's an issue of arithmetic,  
5 primarily. Typically, proved reserves estimates  
6 are not updated on a continuous basis.

7 Typically, estimates might be made  
8 when a field development plan is prepared.

9 Production pursuant to that plan  
10 might then occur through the execution of the  
11 activities that are planned on bringing the  
12 facilities and wells into production.

13 It can happen that if in the  
14 intervening years no updates to the -- no  
15 revision is made to the proved reserves estimate  
16 that the amount of production that has occurred  
17 in the intervening years actually exceeds the  
18 proved reserves estimate originally placed on  
19 the books, causing the apparent amount of  
20 reserves left to be produced to be negative.

21 And it's essentially an issue  
22 that's created when an estimate of proved  
23 reserves is registered in the database or  
24 whatever system is used to capture the  
25 information and is then not updated in

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1 JOHN RICHARD PAY

2 subsequent years.

3 Q. When you went to Oman did you find  
4 that there was an issue of negative reserves  
5 with PDO's reporting?

6 A. I can't recall whether or not I  
7 did.

8 Q. Okay. Have you heard of the  
9 acronym STOIP, S-T-O-I-I-P?

10 A. Yes.

11 Q. What does that stand for?

12 A. It stands for stock tank oil  
13 initially in place.

14 Q. Do you recall a STOIP review  
15 being conducted in Oman during your tenure as

16 GRC?

17 A. Now that you mention it it rings a  
18 bell, but I'm struggling to remember the detail  
19 of it.

20 Q. Do you know what the focus of what  
21 a STOIP review is?

22 A. Yes, indeed. STOIP is a measure  
23 of the amount of oil that is present in a  
24 reservoir at initial conditions upon discovery.  
25 By developing a reservoir a proportion of the  
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1 JOHN RICHARD PAY  
2 STOIP can be produced. Typically, not a very  
3 high proportion. It's typical that an oil  
4 reservoir if an average -- on average one would  
5 expect to produce maybe 30 or 35 percent of the  
6 STOIP over the lifetime of the field. Many of  
7 the reservoirs in Oman have been on production  
8 for a long time, maybe are approaching that 30  
9 to 35 percent recovery point and, therefore,  
10 being close to being exhausted in terms of their  
11 primary development many of the enhanced oil  
12 techniques that I previously referred to are in  
13 effect targeting the 65 to 70 percent of STOIP  
14 that is still sitting in the reservoir and which  
15 may be exploited by additional recovery  
16 techniques.

17 So a STOIP review, to me would  
18 suggest an inventory is being made of the amount  
19 of oil that was originally in place for each  
20 reservoir, how much is left to be produced, and  
21 which might therefore be targeted by additional  
22 recovery techniques.

23 Q. So with regard to Oman this would  
24 be -- such a review would be conducted with  
25 regard to fields that were already producing but  
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1 JOHN RICHARD PAY  
2 for which there was a belief that there would be  
3 incremental production in a future date; am I  
4 correct?

5 A. That might be one reason why such  
6 a review would be done.

7 Q. With regard to Oman do you have  
8 any recollection having discussed this now as to  
9 reasons why a STOIIP review was conducted?

10 A. My recollection and my memory has  
11 been refreshed a little by the discussion we  
12 just had, that a review was in progress  
13 primarily for that purpose.

14 Q. Again, having discussed this, do  
15 you recall when the review commenced?

16 A. My recollection is that it was in  
17 progress in or around 2003. I can't remember  
18 specifically the time.

19 Q. And, again, just trying to refresh  
20 your recollection, do you recall if it was being  
21 conducted during your visit to Oman? That is  
22 was it in progress?

23 A. Thank you for reminding me.

24 I don't mean to be --

25 Q. That's okay.

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1 JOHN RICHARD PAY

2 A. I believe it was. Actually, I  
3 remember walking into a room and having a brief  
4 discussion with a team that was looking at the  
5 portfolio. And now that you've reminded me I  
6 think that is the study they were engaged with.

7 Q. Do you recall who that -- who the  
8 members of that team were?

9 A. Not in -- not in detail. I can  
10 remember one or two individuals. I think Wim  
11 Swinkels, S-W-I-N-K-E-L-S, was on the team.

12 THE REPORTER: I'm sorry, the  
13 first name?

14 THE WITNESS: W-I-M.

15 BY MR. HABER:

16 Q. Do you know who the other person  
17 was?

18 A. I seem to recall there were five  
19 or six people in the room. It was a relatively  
20 brief visit. No, I can't recall who else.

21 Q. I'm sorry?

22 A. No. If I gave you a name I'm  
23 guessing. I think I know, but I don't know for



24 sure.

25 Q. Do you know where Mr. Swinkels

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1 JOHN RICHARD PAY

2 worked within Shell?

3 A. At that time, no, I don't.

4 Q. Do you know if he worked at PDO?

5 A. No, I don't.

6 Q. Who -- who was responsible for

7 conducting STOIP reviews?

8 A. I don't know.

9 Q. Did Shell have a particular

10 service organization responsible for conducting

11 STOIP reviews?

12 A. Well, first of all I answer your  
13 question by saying it's not a routine type of

14 thing to do.

15 This sounds like a study that had  
16 been -- to me it sounds like a study that had  
17 been commissioned by PDO for their own  
18 particular purposes.

19 Q. When you say a STOIP review is  
20 not a routine review, can you recall any other  
21 instances during your tenure as group reserves  
22 coordinator where a STOIP review had been  
23 conducted?

24 A. Well, clarify my previous answer  
25 in terms of STOIP reviews that would go through

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1 JOHN RICHARD PAY

2 the entire portfolio of an operating unit are  
3 not typically things one encounters happening on  
4 a routine basis.

5 However, as part of an individual  
6 field or reservoir assessment the starting point  
7 is always an assessment of STOIP. This is the  
8 starting point of the evaluation.

9 So STOIP is calculated for  
10 individual assets on an individual basis. But  
11 to look at the whole portfolio of an operating  
12 unit, I can't recall any other instance of that  
13 happening.

14 Q. Now, was there any license expiry

15 issue in Oman that you recall?

16 A. Yes. My understanding is that the  
17 license, PDO's operating license was due to  
18 expire, I think in either 2012 or 2014, I'm not  
19 entirely clear on the date just now. And that  
20 presented a similar issue to that prevalent in  
21 SPDC, which we've already discussed.

22 Q. Do you remember how that issue had  
23 been resolved, if it had been resolved?

24 A. There was discussion. I was  
25 involved in discussions with the regional

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1 JOHN RICHARD PAY

2 advisor for the Middle East situated in The  
3 Hague who advised me that negotiations were in  
4 progress to seek a license extension.

5 Q. Do you know who was responsible  
6 for the negotiations with the Omani government?

7 A. I don't know who was conducting  
8 the investigations.

9 Q. Do you know if it with use Mr. Van  
10 der Vijver?

11 A. No.

12 Q. Do you know if it was Mr. Watts?

13 A. No.

14 Q. Do you know if it was Ms. Boynton?

15 A. I don't know who was doing it.

16 Q. Again, just trying to refresh your  
17 recollection?

18 A. No, I don't know.

19 Q. Do you know if a legal opinion was  
20 sought with regard to the license expiry issue  
21 in Oman?

22 A. No.

23 Q. With regard to seeking extensions  
24 of a license do you have an understanding of  
25 what Shell's prior practice had been with regard

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1 JOHN RICHARD PAY

2 to the timing when an extension would be sought?

3 MR. TUTTLE: Objection to form,  
4 foundation.

5 THE WITNESS: I don't think there

6 was a standard practice, if that is what you're

7 referring to.

8 BY MR. HABER:

9 Q. Well, it is.

10 I want to go back for a moment to  
11 presentation to the CMD. I want to mark as the  
12 next exhibit, Exhibit 18.

13 (Pay Exhibit Number 18 was marked  
14 for identification.)

15 THE WITNESS: Yes.

16 BY MR. HABER:

17 Q. Have you seen -- let me -- sorry,  
18 identify for the record.

19 We just marked as Pay Exhibit 18  
20 an e-mail from Ingrid De Wit, dated July 18,  
21 2002, to Malcolm Brinded. The subject is CMD  
22 note pre-reading. It has two attachments, at  
23 least that's what's reflected on the e-mail.  
24 The Bates range is V00120778 through V00120801.  
25 There's another range, DB 07941 through  
0417

1 JOHN RICHARD PAY

2 DB 07964.

3 Have you seen this document before  
4 today?

5 A. The attachment to the e-mail, yes.

6 Q. And --

7 A. Or I should say the attachment to  
8 the cover note, the one that's behind the cover  
9 note.

10 Q. The attachment you're referring  
11 to, the note for decision reserves outlook?

12 A. Yes. The one beginning on page  
13 ending 780.

14 Q. Did you prepare this note for  
15 discussion?

16 A. Yes.

17 Q. Were you requested to do so by  
18 someone?

19 A. Mr. Van der Vijver, I believe.

20 Q. And do you recall the  
21 circumstances surrounding Mr. Van der Vijver  
22 requesting you to prepare this note?

23 A. Yes.

24 Q. What did he say? What were the  
25 circumstances?

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1 JOHN RICHARD PAY

2 A. The circumstances as I understood  
3 them to be were in relation to the fact that  
4 Shell's Reserves Replacement Ratio in recent  
5 years had been below the 100 percent target and  
6 were projected to continue below that target in  
7 2002 and 2003 and, therefore, I understand that  
8 Mr. Van der Vijver was seeking to understand the  
9 reasons for that.

10 Q. And in preparing this note were  
11 you trying to provide the reasons for the  
12 Reserves Replacement Ratio being below  
13 100 percent over the past few years?

14 MR. TUTTLE: Object to form.

15 THE WITNESS: No. I would  
16 characterize this note as being forward looking.  
17 BY MR. HABER:

18 Q. Was there any message or messages  
19 that you were trying to convey in preparing this  
20 note?

21 A. My intention in this note was to  
22 inform as to inform management as to the  
23 disposition of our hydrocarbon volumes inventory  
24 and to try and help them to understand the  
25 reasons why less mature, unproved resource

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1 JOHN RICHARD PAY

2 volumes were not maturing to the proved category  
3 at the pace that might have been desirable.

4 My intention was also to indicate  
5 areas where opportunities to improve that  
6 performance might exist.

7 Q. Now, do you know if this note was  
8 distributed to members of the CMD as pre-reading  
9 material for a meeting?

10 A. The only evidence that it was is  
11 the evidence I see before me now from the  
12 covenants.

13 Q. Okay. Did you ever get any

14 feedback from any member of the CMD about the  
15 content of the note?

16 A. No.

17 Q. Did you receive feedback from  
18 Mr. Van der Vijver during the drafting phase of  
19 the note?

20 A. It's kind of inconceivable he  
21 wouldn't have given me comments at some stage,  
22 but I can't remember specifically what the  
23 comments might have been.

24 Q. I would like you to turn to page  
25 16, and that's the page that ends 120795, it's

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1 JOHN RICHARD PAY

2 Attachment 1g. Is this -- withdrawn.

3 What does this attachment show?

4 A. This attachment is entitled,  
5 Hydrocarbon Resource Challenges by OU, and it  
6 attempts to summarize some of the issues  
7 affecting hydrocarbon resource maturation in  
8 various different geographical locations.

9 Q. Is this a form of the potential  
10 reserves exposure catalog that we've talked  
11 about and looked at throughout proceedings  
12 yesterday and today?

13 MR. TUTTLE: Object to form.

14 BY MR. HABER:

15 Q. You can answer.

16 A. This is a report that I produced  
17 very early in my tenure of the resource  
18 coordinator's job. Several of the issues that  
19 you find on this attachment to which you've  
20 referred were reproduced in the catalog to which  
21 you've referred.

22 Q. Do you recall Mr. Van der Vijver  
23 commenting on Attachment 1g?

24 A. As I said, I don't remember  
25 specific comments received from Mr. Van der

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1 JOHN RICHARD PAY

2 Vijver.

3 Q. Other than receiving comments to  
4 any of the attachments or the note do you recall

5 any conversations with Mr. Van der Vijver  
6 concerning the particular operating unit that's  
7 identified in Attachment 1g?

8 A. Can you please repeat the  
9 question?

10 Q. What I'm looking for is rather  
11 than just looking at this attachment do you  
12 recall any discussions with Mr. Van der Vijver  
13 around July 2002 where you discuss SPDC, for  
14 instance?

15 MR. TUTTLE: Object to the extent  
16 asked and answered. We spent a long time these  
17 two days on SPDC and I'm quite sure you asked  
18 him before if he had conversations with Mr. Van  
19 der Vijver. I just want that on the record.

20 MR. HABER: I'm sure I have.

21 However, I'm not certain that I've  
22 asked him in particular about July of 2002.

23 BY MR. HABER:

24 Q. Do you recall any discussions with  
25 Mr. Van der Vijver in July 2002 about SPDC?

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1 JOHN RICHARD PAY

2 A. Sitting here today, no.

3 Q. Do you recall any discussions with  
4 Mr. Van der Vijver in July of 2002 where you  
5 discussed SNEPCO?

6 A. No, I don't.

7 Q. I believe we did have some  
8 testimony about some discussion with Mr. Van der  
9 Vijver concerning Australia; is that correct?

10 A. Yes.

11 Q. Do you recall discussing with  
12 Mr. Van der Vijver in July of 2002, Brunei?

13 A. No, I do not.

14 Q. How about discussing with Mr. Van  
15 der Vijver, Kazakhstan? Again, same time frame,  
16 July 2002?

17 A. I'm sorry, I can't help you.

18 Q. If you turn to page 8 of the note  
19 under 4. -- 4 and then 4.1, 4 being External  
20 Storyline. 4.1, 2001 Investor Relations, was  
21 there a reason why you included this section in

22 the note for discussion?

23 A. My recollection is that I was  
24 either instructed or advised to after  
25 consultation with colleagues.

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1 JOHN RICHARD PAY

2 Q. Do you recall who you consulted  
3 with?

4 A. Since this was the first example  
5 of such a note that I had written, I consulted  
6 primarily with a colleague by the name of David  
7 Freedman, F-R-E-E-D-M-A-N to seek his guidance  
8 as to the type of information I might include in  
9 such a document.

10 Q. Do you recall having any  
11 discussions with Rhea Hamilton?

12 MR. TUTTLE: In 2002?

13 BY MR. HABER:

14 Q. Again, in regard to this section,  
15 yes.

16 A. No. I couldn't say for sure that  
17 she had taken a job with Mr. Frank Coopman at  
18 that time.

19 Q. How about -- do you recall having  
20 conversations about this section with Simon  
21 Henry?

22 A. I'm reasonably certain I didn't  
23 encounter Mr. Henry until much later.

24 Q. If you take a look at this section  
25 what was the information upon which you based

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1 JOHN RICHARD PAY

2 this section when you drafted it?

3 A. May I read it again?

4 Q. Yes, please.

5 A. Are you referring to 4.1 and 4.2?

6 Q. No. Just 4.1.

7 A. Could you please repeat your  
8 question?

9 Q. With regard to preparing 4.1 I  
10 asked what was the information upon which you  
11 based this section on?

12 A. Well, there would have been a



13 combination of sources of the information. If  
14 you're referring specifically to the  
15 presentations to investors in 2001 then I would  
16 have been given access by, whom I can't  
17 remember, to such external presentations.

18 Q. How about reviewing analyst  
19 reports that were written by analysts in the  
20 investment community?

21 A. I read those as a matter of  
22 routine.

23 Q. And why did you read those as a  
24 matter of routine?

25 A. Out of professional interest

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1 JOHN RICHARD PAY  
2 specifically in the way that information that we  
3 were publishing and that I in my job was  
4 responsible for collating was being used in the  
5 analyst community.

6 Q. And with regard to the last  
7 paragraph in 4.1, is that an example of an  
8 awareness of what the analyst community was  
9 saying about Shell?

10 MR. TUTTLE: Objection to form,  
11 foundation, document speaks for itself.

12 THE WITNESS: That paragraph does  
13 not appear to refer to statements by analysts.

14 BY MR. HABER:

15 Q. The reference says, in "discussing  
16 resource volumes." May I ask, who did you mean  
17 in discussing resource volumes or with whom did  
18 you mean?

19 A. What I meant was when Shell has  
20 presented to, in discussions with external  
21 parties, such as the analyst community, Shell  
22 has stressed and I recall I saw presentations in  
23 which statements to that effect had been made  
24 that expectation resource based was a more  
25 reliable indicator of performance.

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1 JOHN RICHARD PAY

2 Q. And what is your understanding as  
3 to the reason why it is a more reliable

4 barometer for, as it says here, growth  
5 potential?

6 A. My understanding?

7 Q. Yes.

8 A. As an individual, as an engineer I  
9 would agree with the statement on the basis that  
10 we plan our business and expect to achieve the  
11 expectation resource volumes, not the proved  
12 reserves volumes, over the full lifetime of a  
13 field or a project.

14 Q. Now, in your prior answer when I  
15 asked to whom you were referring in this  
16 sentence in discussing resource volumes you said  
17 with external parties such as the analyst  
18 community.

19 Were there other external parties  
20 that you were referring to?

21 A. At the time, and I'm pretty sure  
22 at the time I was referring exclusively to the  
23 type of presentation that would have been made  
24 by Shell representatives to shareholders or  
25 their representatives or analysts in open forum.

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1 JOHN RICHARD PAY

2 Typically the sort of presentation  
3 that would be made to a company at the release  
4 of annual or quarterly performance figures.

5 I'm not aware of any other  
6 discussions that may or may not have been  
7 carried out.

8 Q. Okay. With regard to the  
9 information as contained in this note, did you  
10 believe that you accurately presented all of the  
11 information for the CMD's consideration?

12 A. Yes.

13 Q. And did you believe that the  
14 information in this note was presented in a  
15 clear fashion so that the recipient would  
16 understand the messages that were being  
17 conveyed?

18 MR. TUTTLE: Objection to form,  
19 calls for speculation.

20 MR. HABER: I'm asking what his

21 belief was.

22 BY MR. HABER:

23 Q. Did you believe you presented the  
24 information clearly?

25 A. I believe I did.

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1 JOHN RICHARD PAY

2 Q. Okay.

3 MR. HABER: Why don't we just take  
4 a short break and then we'll go on to one, maybe  
5 two more topics, but it should be relatively  
6 brief.

7 MR. TUTTLE: Okay.

8 THE VIDEOGRAPHER: We're going off  
9 the record. The time is 4:35 p.m.

10 (A brief recess was taken.)

11 THE VIDEOGRAPHER: We are back on  
12 the record. The time is 4:46 p.m.

13 (Pay Exhibit Number 19 was marked  
14 for identification.)

15 MR. HABER: Mr. Pay, I just handed  
16 you what we're marking as Pay Exhibit 19, which  
17 is an e-mail with an attachment. The e-mail is  
18 from Frank Coopman, it's dated December 2, 2003.  
19 It's to John Bell, Matthias Bichsel, John  
20 Darley, with a cc to you. The attachment on the  
21 e-mail is called Script for Walter on the  
22 prove...

23 If you look at the attachment it  
24 is called Script for Walter on the proved  
25 reserves position. The Bates number is

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1 JOHN RICHARD PAY

2 RJW00780060 through RJW00780063.

3 THE WITNESS: Yes.

4 BY MR. HABER:

5 Q. Have you seen this e-mail and  
6 attachment before today?

7 A. Yes.

8 Q. Did you have an understanding of  
9 why Mr. Coopman sent this e-mail to you and the  
10 others listed on here on the e-mail?

11 A. I don't know why he sent it to the

12 people on the to list; Bell, Bichsel, and  
13 Darley. He copied it to me I imagine because  
14 I'm a co-signatory to it.

15 Q. Did you assist Mr. Coopman in  
16 writing this script?

17 A. My name is on the bottom of it as  
18 well as his. Yes, I did.

19 Q. Of the two of you who took the  
20 lead in preparing the document?

21 A. Mr. Coopman.

22 Q. Do you recall what your  
23 contributions to these script were?

24 A. In general?

25 Q. Yes.

0430

1 JOHN RICHARD PAY

2 A. Any matters relating to proved  
3 reserves estimates and the numbers involved.  
4 Not the materiality section. I contributed to  
5 the Fuel and Flare section. I believe that was  
6 it.

7 Q. Why was this script prepared?

8 A. In effect this was Mr. Coopman's  
9 and my response to the e-mail that I believe we  
10 saw previously as Exhibit Pay 16, which was an  
11 e-mail from Walter van der Vijver to me, copied  
12 to Mr. Bell and Mr. Coopman concerning -- well,  
13 we've covered what that document contains.

14 As I have mentioned before, when  
15 Mr. Van der Vijver sent that e-mail I was on  
16 leave. By the time I returned from leave it was  
17 evident to me that Mr. Coopman, informed  
18 primarily by the audit results or the emerging  
19 picture that we've discussed, particularly in  
20 relation to SPDC and PDO had formed in his mind  
21 the opinion that a recategorization of our  
22 reserves was required and it was in that vein  
23 that we prepared this note.

24 Q. Was he the one who had determined  
25 to write the note or as it's called here, a

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1 JOHN RICHARD PAY

2 script?

3 A. Yes.

4 Q. And he approached you to assist  
5 him in preparing it?

6 A. Yes.

7 Q. Did he explain why he was seeking  
8 your assistance in preparing the script?

9 A. In my capacity as the reserves  
10 coordinator and, therefore, in possession of  
11 certain factual information that would be  
12 required to complete this document.

13 Q. How long did it take you to draft  
14 the document?

15 A. My recollection is that this  
16 specific document was prepared over a period of  
17 a couple of days.

18 Q. When Mr. Coopman had approached  
19 you to assist him with the drafting of this  
20 document did you agree with his assessment that  
21 there should be a recategorization?

22 A. In light of the information that  
23 had recently emerged from PDO and SPDC in  
24 particular I agreed that it was an appropriate  
25 course of action.

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1 JOHN RICHARD PAY

2 Q. Did the discussions that you had  
3 with -- withdrawn.

4 Did the discussion that you had  
5 with Mr. Coopman when he approached you, did it  
6 include operating units other than PDO and SPDC?

7 A. Yes. I think some of those are  
8 actually specifically mentioned here or rather  
9 the Gorgon example is given.

10 Q. Did you and Mr. Coopman discuss or  
11 within the discussion contemplate a group-wide  
12 analysis of Shell's reserves position?

13 MR. TUTTLE: Are you still on the  
14 first discussion with Mr. Coopman?

15 MR. HABER: Yes. When he was  
16 approached, yes.

17 THE WITNESS: I don't recall if  
18 there was such a discussion upon his first  
19 approach to me.

20 BY MR. HABER:

21 Q. Was there subsequent discussions  
22 where the scope of a debooking expanded to a  
23 review of the group's reserves position?

24 MR. TUTTLE: Objection to form.

25 BY MR. HABER:

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1 JOHN RICHARD PAY

2 Q. You can answer.

3 MR. TUTTLE: You can answer.

4 THE WITNESS: Yes. In the sense  
5 this note initiated a rapid succession of events  
6 in a short period of time, during which it was  
7 determined that if a recategorization were to be  
8 made it should ensure that no stone was left  
9 unturned.

10 BY MR. HABER:

11 Q. In your answer you said -- you  
12 say, yes, in the sense this note initiated a  
13 rapid succession of events in a short period of  
14 time. What events were you referring to?

15 A. The initiation of project Rockford  
16 and the events surrounding that.

17 Q. When was -- when was it decided  
18 that there would be this project Rockford  
19 analysis?

20 MR. TUTTLE: I'm just going to  
21 caution Mr. Pay that to the extent that as we  
22 move into project Rockford any of his answers  
23 involve communications with counsel, again, as I  
24 instructed you before, we should step outside,  
25 understand what those discussions were and

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1 JOHN RICHARD PAY

2 ensure we don't inadvertently waive a privilege  
3 by disclosing otherwise confidential  
4 communications with counsel. So I realize it  
5 may not be exactly applicable to the time period  
6 question, but I just want to make sure you  
7 understand that as we go forward into project  
8 Rockford questions. So.

9 THE WITNESS: Understood.

10 And I'm afraid I'm going to have

11 to ask you to repeat the question.

12 BY MR. HABER:

13 Q. I knew you were going to say that.

14 I asked when was it decided that  
15 there would be this project Rockford analysis?

16 A. And you're referring to -- when  
17 you say project Rockford analysis you're  
18 referring to an analysis of the group's  
19 worldwide reserves position?

20 Q. That's correct.

21 A. I can't remember a specific time  
22 that it was decided. I would suggest I was  
23 perhaps not -- not involved directly in that  
24 decision. However, I -- my recollection is that  
25 a short period of time after this note was

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1 JOHN RICHARD PAY  
2 prepared I was asked to coordinate the  
3 preparation of a larger dossier concerning the  
4 entire gamut of the recategorization as we then  
5 saw it, essentially addressing the 3.9 billion  
6 BOE of reserves that originally fell into the  
7 scope.

8 Q. Who asked you to prepare or  
9 coordinate the, if you will, the portfolio of  
10 assets to be reviewed?

11 A. I can't remember who gave me the  
12 instruction.

13 Q. Do you know when the project  
14 received its name, project Rockford?

15 A. I can't remember exactly when that  
16 was.

17 Q. When you were first asked to  
18 coordinate the materials was it presented to you  
19 as project Rockford?

20 A. Not that I recall.

21 Q. Do you recall if the review got  
22 its name, project Rockford, in December of 2003?

23 A. Well, certainly not before, to my  
24 knowledge. My recollection is that it was  
25 sometime in December 2003. I think you said '4,

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1 JOHN RICHARD PAY



2 did you?

3 Q. '3. If I said '4 I meant '3.

4 Now, at the time -- let's step  
5 back again and look at the script for Walter.

6 At the time you prepared this  
7 script with Mr. Coopman had you communicated the  
8 content of this script with the external  
9 auditors?

10 A. No -- I don't recall having done  
11 so.

12 Q. Do you know if Mr. Coopman had  
13 communicated the content of this script to the  
14 external auditors?

15 A. I don't know whether or not he  
16 had.

17 Q. During the time that you were  
18 drafting this script with Mr. Coopman do you  
19 recall consulting with the external auditors,  
20 advising them of what you were writing in this  
21 document?

22 A. No. I don't recall any such  
23 discussion.

24 Q. With regard to your work on  
25 project Rockford did you have any interaction  
0437

1 JOHN RICHARD PAY

2 with the external auditors?

3 A. Yes. The reason I'm hesitating is  
4 that I can't remember exactly when that  
5 engagement started.

6 Obviously there was engagement  
7 after the announcement of the 9th of January,  
8 but --

9 Q. The first announcement of  
10 recategorization?

11 A. Correct. Yes. I can't remember  
12 if there was any engagement before then.

13 Q. When you had had the interaction  
14 with the external auditors after the first  
15 announcement in January of 2004 do you recall if  
16 there was an expression of agreement by the  
17 auditors with the recategorization?

18 MR. TUTTLE: Object to form.

19 THE WITNESS: No, I can't

20 remember.

21 BY MR. HABER:

22 Q. Which auditors, KPMG or PWC, do  
23 you recall having the interaction with?

24 A. Well, certainly KPMG, since their  
25 representatives were physically sitting in our

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1 JOHN RICHARD PAY

2 office at the time. I don't recall whether or  
3 not I was involved in discussions with PWC.

4 Q. Did KPMG have office space in the  
5 center throughout the year?

6 A. No, not to my knowledge.

7 Q. Were they given office space in  
8 connection with the ARPR?

9 A. Yes.

10 Q. Can you think of any other time  
11 during the year in which the external auditors  
12 were given office space in the center?

13 A. Not in connection with my job.

14 Q. Now, with regard to the script,  
15 again, do you recall having any discussions with  
16 Ms. Boynton about the content of the script?

17 A. I'm pretty sure I never discussed  
18 this script with Ms. Boynton.

19 Q. Do you recall having any  
20 conversations with Mr. Van der Vijver about the  
21 script?

22 A. At what time?

23 Q. After it was presented to him?

24 A. Obviously I had conversations with  
25 Mr. Van der Vijver after that time. Whether

0439

1 JOHN RICHARD PAY

2 those conversations specifically refer to this  
3 script, I can't remember. Certainly there were  
4 conversations in relation to the  
5 recategorization exercise.

6 Q. And what was -- I'm sorry, what  
7 were the sum and substance of those  
8 conversations with Mr. Van der Vijver?

9 A. I can't recall specific details of

10 them.

11 Q. As far as you can recollect they  
12 concerned the recategorization?

13 A. Yes. And I would say that there  
14 was -- the atmosphere at the time was to try to  
15 ensure that we made the recategorization as full  
16 and as accurate as we could, so there was a  
17 drive for completeness in the analysis and an  
18 understanding of what components there were in  
19 the recategorization. It was in that nature  
20 that I recall the tone and tenor of the  
21 conversations that we had.

22 Q. And in that regard was Mr. Van der  
23 Vijver pushing for transparency and  
24 completeness?

25 A. I wouldn't characterize -- I don't  
0440

1 JOHN RICHARD PAY  
2 recall a push on his part, no. I wouldn't  
3 characterize it in the terms that you just used.

4 Q. How would you characterize it?

5 A. I don't know what Mr. Van der  
6 Vijver was pushing for or wanting, but the  
7 discussions I had with him were in relation to  
8 the detail and completeness of the assessment.

9 Q. That's what I'm referring to,  
10 those conversations?

11 MR. TUTTLE: Object to the form.  
12 I'm not sure that's a question.

13 MR. HABER: I'm referring to those  
14 conversations, did he understand that Mr. Van  
15 der Vijver was advocating for completeness and  
16 transparency in the work that was being done,  
17 that you were doing?

18 MR. TUTTLE: Objection, asked and  
19 answered. I think he just testified as to his  
20 understanding of those conversations, but you  
21 can tell him again.

22 BY MR. HABER:

23 Q. You can answer.

24 A. I don't know how else to express  
25 it than I already have.

0441

1 JOHN RICHARD PAY

2 My recollection is that there was

3 an interest in understanding what the components

4 were and what the volumes were and what the

5 status of the evaluation was, progress reports,

6 updates, how does it look now? What's the

7 latest, how are you getting along with the

8 documents, things like that type of questions.

9 Q. Okay. Now, looking at the e-mail

10 from Mr. Coopman to the recipients, Mr. Bell,

11 Bichsel, and Darley. He says, "please find

12 attached our draft note which is now with

13 Walter, no comments as yet. My functional boss

14 is not happy."

15 Do you have an understanding as to

16 why Mr. Coopman said his functional boss is not

17 happy?

18 A. Mr. Coopman indicated to me

19 verbally that Ms. Boynton had expressed her

20 disappointment with the document to him.

21 Q. And was Ms. Boynton Mr. Coopman's

22 functional boss?

23 MS. WICKHEM: Object to form,

24 foundation.

25 THE WITNESS: I didn't know. We

0442

1 JOHN RICHARD PAY

2 referred earlier to doted relationships. I

3 don't know that he had a reporting relationship

4 to her.

5 BY MR. HABER:

6 Q. When Mr. Coopman indicated to you

7 verbally that Ms. Boynton had expressed her

8 disappointment with the document do you recall

9 the sum and substance of what he said?

10 A. Really, beyond saying that she was

11 angry that this note had been issued by e-mail

12 without prewarning, beyond that I don't recall

13 any specific comments.

14 Q. Did Mr. Coopman say that during

15 the discussion he had with Ms. Boynton she had

16 made a comment about the content of the

17 document?

18 A. Not that I recall.

19 Q. Did Mr. Cooper say that during the  
20 discussion he had with Ms. Boynton she had made  
21 a comment about the decision to debook reserves  
22 that's reflected in the document?

23 MR. TUTTLE: Objection,  
24 foundation.

25 THE WITNESS: Again, not that I  
0443

1 JOHN RICHARD PAY  
2 recall.

3 BY MR. HABER:

4 Q. Did there come a time where you  
5 learned what Mr. Van der Vijver had said once he  
6 had reviewed this document?

7 A. Yes.

8 Q. And what did you learn was Mr. Van  
9 der Vijver's response?

10 A. Shortly after the e-mail was  
11 issued, when is I think is a matter of public  
12 record, I understand that Mr. Van der Vijver  
13 suggested that the document ought to be  
14 destroyed, that it wasn't what he had asked for  
15 in his e-mail that we referred to in the  
16 previous exhibit, and I was shown that e-mail on  
17 Mr. Coopman's computer screen.

18 Q. Did you understand Mr. Van der  
19 Vijver to be directing you or Mr. Coopman to  
20 destroy the document?

21 A. Well, I didn't destroy my copy. I  
22 didn't understand -- well, I didn't understand  
23 it to be an instruction to destroy the document.  
24 I didn't destroy my copy.

25 Q. If you didn't understand his  
0444

1 JOHN RICHARD PAY  
2 response to be an instruction to destroy the  
3 document, what was your understanding of what he  
4 was saying?

5 MR. TUTTLE: Objection,  
6 argumentative.

7 BY MR. HABER:

8 Q. You can answer.

9 A. My understanding of what he was  
10 saying was that he realized the importance of  
11 the message he had received and obviously was  
12 upset about it in terms of its forward  
13 implications.

14 (Pay Exhibit Number 20 was marked  
15 for identification.)

16 BY MR. HABER:

17 Q. I'm going to mark as Pay  
18 Exhibit 20 an e-mail from Walter van der Vijver.  
19 It's actually two e-mails. The last of the  
20 e-mails is from Walter van der Vijver, it's  
21 dated December 2, 2003, and it's to Frank  
22 Coopman, re reserves. The Bates number is  
23 RJW00750996.

24 A. Yes.

25 Q. Have you seen this e-mail before

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1 JOHN RICHARD PAY

2 today?

3 A. It appears to be the one I was  
4 referring to in my previous answer.

5 Q. Do you recall having a  
6 conversation with Mr. Coopman after Mr. Coopman  
7 had received this e-mail?

8 A. I recall that I did have a  
9 conversation with Mr. Coopman, because  
10 Mr. Coopman invited me to review this e-mail on  
11 his screen. However, I cannot sitting here  
12 today recall precisely what was said in that  
13 conversation.

14 Q. Were you surprised by Mr. Van der  
15 Vijver's reaction?

16 A. Actually, no.

17 Q. Do you know if -- withdrawn.

18 If you look at the last paragraph,  
19 in particular the last sentence, he says, "I  
20 have been absolute clear on this at numerous  
21 occasions." And I believe the reference there  
22 is to flagging issues and creating options and  
23 not making firm recommendations?

24 MR. TUTTLE: Object to form,  
25 characterization of the document.

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1 JOHN RICHARD PAY

2 BY MR. HABER:

3 Q. Am I correct that that's the  
4 reference in this e-mail?

5 A. I don't know. I don't recall  
6 having any conversations with Mr. Van der Vijver  
7 in which he made such issues clear to me, so I  
8 can only speak for myself.

9 MR. FERRARA: It's 5:15. After  
10 two days --

11 MR. HABER: We are coming to an  
12 end.

13 MR. FERRARA: Can we end it?

14 MR. HABER: Shortly.

15 MR. FERRARA: How shortly?

16 MR. HABER: 20 minutes.

17 MR. FERRARA: It's 5:15. We asked  
18 to be out by 5:00. You said we would be done by  
19 5:00.

20 MR. HABER: I said 5:00, 5:30ish  
21 is what I said, and I intend to try to honor  
22 that. I also said that he would be able to  
23 leave well in advance of the train that he has  
24 to catch.

25 BY MR. HABER:

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1 JOHN RICHARD PAY

2 Q. Now, I just want to ask you a  
3 couple questions about the reserves guidelines.  
4 I believe yesterday you had testified that that  
5 was one of the responsibilities of the group  
6 reserves coordinator; correct?

7 A. Yes.

8 Q. And during your tenure did you  
9 revise Shell's internal reserves reporting  
10 guidelines?

11 A. Yes, I did.

12 Q. And do you recall the reasons why  
13 the guidelines needed to be revised?

14 MR. TUTTLE: Object to form. I  
15 just want to make sure he understands you're  
16 asking him for each one of the revisions, the



17 reason why each revision was made.

18 MR. HABER: Generally. Generally  
19 speaking.

20 MR. TUTTLE: I object at the end  
21 of two days to ask him to recall a document. If  
22 you have the document you can put it in front of  
23 him.

24 MR. HABER: I'm just asking for  
25 his general recollection as to why he revised

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1 JOHN RICHARD PAY  
2 the guidelines.

3 THE WITNESS: Primarily to seek to  
4 add clarity to the document in the way that it  
5 should be used in the preparation of proved  
6 reserves estimates. Whilst that had been the  
7 objective of the revision that my predecessor  
8 had made, Mr. Roosch, in April 2002, my  
9 observation at the end of 2002 was still that  
10 people had -- people who were using the document  
11 had some difficulty understanding precisely what  
12 was required of them, so I made some revisions  
13 to attempt to correct that.

14 BY MR. HABER:

15 Q. Now, generally -- I'm sorry. I  
16 was going to ask you generally do you recall  
17 what the revisions were?

18 A. Well, I would -- my recollection  
19 is that in general they were to add clarity. I  
20 believe there were some areas where we also  
21 adjusted the criteria for proved reserves  
22 booking, particularly in relation to project  
23 technical maturity and commercial maturity  
24 around VAR 3 and FID milestones to make it  
25 clearer which projects should be considered at

0449

1 JOHN RICHARD PAY  
2 each of those milestones for proved reserves  
3 attribution.

4 Q. Were these -- the revisions to the  
5 guidelines, did they need to be approved by the  
6 ExCom?

7 A. Yes.

8 Q. And were your proposed revisions  
9 to the guidelines approved by the ExCom?

10 A. I can't recall specifically  
11 getting such approval. I find it inconceivable  
12 that I would have issued them without approval.

13 Q. Were the guidelines to be applied  
14 prospectively?

15 A. That was the intention, yes.

16 Q. Was there any intention to apply  
17 these guidelines looking backward,  
18 retroactively?

19 A. At the time it was considered that  
20 that would not be necessary.

21 Q. And why is that?

22 A. For the reason that we wished to  
23 improve our perceived -- our compliance with the  
24 SEC rules, but not in so doing to create a large  
25 negative reduction in our reserves balance which

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1 JOHN RICHARD PAY  
2 would only be added again within a short period  
3 of time through the projects concerned meeting  
4 the revised prospective criteria. This was the  
5 yo-yoing effect that at the time it was felt  
6 would be an unnecessary consequence of us  
7 improving our criteria.

8 Q. Are the guidelines today applied  
9 retroactively, as well as prospectively?

10 MR. TUTTLE: Objection to form,  
11 foundation.

12 THE WITNESS: I don't know, I'm  
13 not involved in reserves estimating process  
14 today.

15 MR. HABER: Okay. I have nothing  
16 further. So I want to thank you very much,  
17 Mr. Pay, and I appreciate you sitting through  
18 these two days.

19 THE VIDEOGRAPHER: This marks the  
20 end of the deposition.

21 MR. FERRARA: Oh, no. Give us an  
22 opportunity to determine whether we have any  
23 questions.

24 MR. TUTTLE: Before you close the

25 record.

0451

1 JOHN RICHARD PAY

2 THE VIDEOGRAPHER: We're going off

3 the record. The time is 5:20 p.m.

4 (A brief recess was taken.)

5 THE VIDEOGRAPHER: We are back on

6 the record. The time is 5:25 p.m.

7

8 EXAMINATION BY COUNSEL FOR

9 SHELL AND THE WITNESS

10

11 BY MR. TUTTLE:

12 Q. Mr. Haber, we just have one

13 follow-up question which is a follow-up to one

14 of your questions earlier.

15 Mr. Pay, Mr. Haber asked you

16 earlier if you were surprised at Mr. Van der

17 Vijver's reaction to the script from Walter and

18 I believe your answer to that question was no.

19 Why weren't you surprised?

20 A. Well, I wasn't surprised. When

21 Walter got angry or upset he kind of expressed

22 himself in extravagant ways. I characterize

23 this as an example of that. It was an example

24 of Walter being angry or upset about an issue

25 and he tended to use language of that type.

0452

1 JOHN RICHARD PAY

2 MR. TUTTLE: Okay. Thank you. We

3 have nothing further.

4 MR. HABER: Can I just follow up?

5 MR. TUTTLE: Sure.

6

7 EXAMINATION BY COUNSEL FOR

8 LEAD PLAINTIFF IN THE CLASS

9

10 BY MR. HABER:

11 Q. Did you -- so did you understand

12 Mr. Van der Vijver's response to be one of anger

13 about the recommendation to debook?

14 A. I said anger or surprise or upset,

15 whatever. I understood the reaction to be

16 Walter being upset to find the reality of the  
17 situation in which we all found ourselves and  
18 which to a large extent we all shared in.

19 Q. And prior to this time did Mr. Van  
20 der Vijver ever communicate a sentiment to you  
21 about wiping the slate clean?

22 A. He had used that type of  
23 terminology in the past.

24 Q. Do you recall when he used that  
25 terminology?

0453

1 JOHN RICHARD PAY

2 A. I believe not long before then.

3 Towards the end of 2003 I seem to  
4 recall a suggestion, which I think was only a  
5 suggestion, that Mr. Van der Vijver was  
6 suggesting that maybe we could -- I don't know  
7 if he actually said wipe the slate clean, but  
8 words to that effect. Restate our 1/1/2003  
9 balance and then proceed from there.

10 MR. HABER: I have nothing  
11 further.

12 MR. TUTTLE: We're done.

13 THE VIDEOGRAPHER: This marks the  
14 end of the deposition of Mr. Pay. Total number  
15 of tapes used today was three. We're going off  
16 the record. The time is 5:28 p.m.

17 (Whereupon, at 5:28 p.m., the  
18 deposition was concluded.)

19 - - - - -

20

21

22

23

24

25

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1 JOHN RICHARD PAY

2 ACKNOWLEDGMENT OF DEPONENT

3 UNITED STATES DISTRICT COURT

4

5 I do hereby acknowledge that I have  
6 read and examined the foregoing pages of the

7 transcript of my deposition and that:

8  
9 (Check appropriate box):

10  
11 ( ) the same is a true, correct and  
12 complete transcription of the answers given by  
13 me to the questions therein recorded.

14  
15 ( ) except for the changes noted in  
16 the attached errata sheet, the same is a true,  
17 correct and complete transcription of the  
18 answers given by me to the questions therein  
19 recorded.

20  
21  
22  
23  
24 \_\_\_\_\_  
25 DATE

SIGNATURE

0455  
1 JOHN RICHARD PAY

2 CERTIFICATE OF NOTARY PUBLIC

3 I, Paula G. Satkin, the officer before whom  
4 the foregoing proceedings were taken, do hereby  
5 certify that the witness whose testimony appears  
6 in the foregoing proceeding was duly sworn by  
7 me; that the testimony of said witness was taken  
8 by me in stenotype and thereafter reduced to  
9 typewriting under my direction; that said  
10 proceedings is a true record of the testimony  
11 given by said witness; that I am neither counsel  
12 for, related to, nor employed by any of the  
13 parties to the action in which these proceedings  
14 were taken; and, further, that I am not a  
15 relative or employee of any attorney or counsel  
16 employed by the parties hereto, nor financially  
17 or otherwise interested in the outcome of the  
18 action.

19  
20 My commission expires October 31, 2010.

21  
22 \_\_\_\_\_  
23 PAULA G. SATKIN

Notary Public in and for the

District of Columbia

24

25



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31 October 2002

*Rec'd 11/1/02*

RE: Form 20-F for the year ended 2001  
File Nos. 1-3788, 1-4039

Dear Mr. Schwall,

With reference to the letter dated October 10, 2002, attached for easy reference, please find the requested supplemental information below.

Our replies to each of the numbered questions in your letter are as follows. Our responses are confined to offshore areas of operations and to the years reported in Form 20-F for the year ended 2001.

1. Proved reserves were booked in 19 discoveries in the Gulf of Mexico on which no production flow test was conducted. Similar bookings were made in other areas outside the United States: Brunei, Malaysia, Denmark, UK and Egypt.

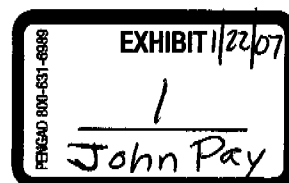
2. In the Gulf of Mexico the range is from zero (i.e. booked in the same year as first commercial production) to five years. In the other areas mentioned it can extend to longer periods when developments are scheduled according to the requirements of long-term sales agreements.

Of the 19 Gulf of Mexico fields mentioned in Question 1, 10 are already on production, 1 has been sold, while the remaining 8 are awaiting first production.

3. No actual cost data covering the period in question is available. We previously obtained an estimate for a two-zone test in over 4000 feet water depth with combined flow periods of 15 days and total days on site for rig and related equipment of 125 days. Its estimated cost was \$44 million. Because of the complexities of this particular test, we would characterize its cost as being at the high end of the range for Gulf of Mexico deepwater testing.

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4. Analogy with producing reservoirs is invoked, supported by open hole logs, MDT (i.e. wireline formation testers), pressure gradient surveys, whole and /or sidewall cores and seismic data as necessary for the purpose of establishing said analogy. This may require more than one well with such measurements for reservoirs in higher risk/uncertainty situations. Fundamentally, our practice does not vary between areas.

Our extensive experience in the Gulf of Mexico, as in other areas where this approach is justified, provides us with a considerable knowledge-base on reservoir setting, rock, and fluid types for use in predicting the production performance and reserves of new fields.

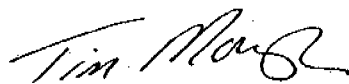
5. In our use, these data provide reservoir characterization that is at least as reliable as a production flow test and they form an adequate basis for the judgment of economic productivity. Recently a technical paper was presented by Shell at an industry conference, describing our findings on this matter. We include this paper as Attachment 1.
6. Such data are not readily available. We note that all fields covered under Questions 1 and 2 that we have brought into production to date have achieved commercial production rates.

We would like to draw your attention to the fact that the regulations of the Mineral Management Service and the proved reserves definitions of the U.S. Department of Energy – Energy Information Agency both acknowledge that a production flow test is not always required to establish proved reserves.

In conclusion, we welcome the opportunity to contribute our views on matters such as this. However, we respectfully suggest that information on industry practice might more effectively be obtained through an open, industry-wide consultative process.

If we may be of further assistance, please do not hesitate to call Hans van Poppel, on +44-207-934-5182.

Sincerely,



Tim Morrison  
Group Controller

Cc: [REDACTED]

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Attachment 1

## Wireline Formation Testers: Uses Beyond Pressures and Fluid Samples - a Viable Replacement of Production Tests

Mohamed Hashem & Gustavo Ugueto  
Shell Deepwater Services

### Abstract

The wireline formation tester (WFT) techniques we are proposing in this paper virtually eliminate the need for a production test, assuming reservoir extent and continuity are not the sought after parameters. In the Gulf of Mexico, where environmental regulations and cost make production testing very difficult, these techniques have been used successfully in multibillion-dollar deepwater investments without regrets.

The techniques go beyond simply obtaining pressures and samples, and shed light on the rock and fluid properties such as: formation effective permeability, static temperature, and the PVT properties of the reservoir fluid. These measurements can be made in real-time down-hole, without the sample ever reaching the surface. In addition, analysis can be performed down-hole to check for fluid variations within a given geological setting, such as compositional grading or variable fluid types in the formation that will be produced. This feature allows for a finer scale of investigation than production tests.

The accuracy of these techniques is contingent upon making measurements on a clean uncontaminated formation fluid sample, and this paper will also describe the optimum method for obtaining a sample with low contamination real-time. Furthermore, the limits of these predictive techniques will also be discussed.

We believe that by using these techniques, we can predict the reservoir properties with sufficient accuracy to avoid costly production tests and therefore reach a development decision sooner reducing the cycle time from discovery to first production.

The proposed techniques described in this paper are protected by Shell for Intellectual Property, however they will be licensed and made available to some wireline contractors for commercial use by the rest of the industry.

### Introduction

In order to better understand reservoir characteristics and, therefore, make sound financial decisions, oil companies generally resort to production tests. A production test can provide information about reservoir extent, well deliverability issues, reservoir fluid properties, and reservoir permeability. Downsides to conducting a production test include the high cost, the environmental limitations of flaring the produced gas, the long flowing period required to estimate the reservoir extent, and the uncertainty regarding the permeability of individual flow units within a reservoir (only the average permeability can be calculated).

As we will describe in this paper, a conditioned WFT can typically provide the majority of the data sought by a production test, with the exception of

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reservoir extent. By carefully selecting high quality input data, Shell has been successfully predicting production rates for deepwater wells. The two most important parameters for predicting rates are the PVT properties of the reservoir fluids and the formation permeability.

To demonstrate the accuracy of the PVT results obtained by WFT, we compare the results of a well sampled in the exploration phase in 1997 using WFT and then sampled during flowing the well from the same zone in 2000. Table 1 shows the PVT comparison. The results show excellent agreement, yet the measurements were taken three years apart.

Knowing the precise properties of the produced fluid in advance allows the proper design of the production and transportation facilities and can lead to significant cost savings. Where differences between WFT and production samples have been observed, they are usually due to improper acquisition or handling of the samples. Some common problems that may cause these differences are: flashing the reservoir fluids during downhole sampling due to excessive pressure draw down, incorrect recombination of surface samples, erroneous estimation of reservoir temperature, etc.

The key for a successful early determination of reservoir properties is obtaining an uncontaminated WFT single-phase reservoir sample.

#### Uncontaminated Reservoir Samples

Previous papers<sup>1,2</sup> have addressed methods of obtaining reservoir samples with low levels of contamination. The

technique we adopted, which relies on the analysis of the near-infrared (NIR) spectrum, has consistently led to the recovery of samples with low levels of contamination. While other methods, such as magnetic resonance techniques, are available today, we have not yet tested them and we are not in the position to comment on their success.

By monitoring selected optical density channels while sampling, and watching their exponential decay, we successfully achieve very low contamination. The optical density values decay exponentially from total absorption at the beginning of the test to the intrinsic value of the native reservoir fluid.

Hashem et al.<sup>1</sup> showed that the Normalized Time function predicts the cleaning time required, provided the pumping is performed at optimum rates. Corrections to the pumping time should be added to the estimate if the pump is not delivering a maximum throughput. The method proposed by Mullins et al.<sup>2</sup> utilizing a color build-up technique works accurately under certain circumstances. However, we have found that this technique is not applicable when there is little contrast between the color of the filtrate and virgin fluid, or when scattering of fines masks the transition from filtrate to virgin fluid. These two conditions occur commonly. Another technique mentioned in the literature involves stopping the pump and checking for saturation pressures was found to be impractical. Stopping the pump to perform the PV test disrupts the clean reservoir fluid streamlines converging towards the probe and could result in extended clean up times. Ideally, pumping should be maintained until a sample is secured in the bottles.

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Also, note that the correct placement of the NIR instrument, downstream from the pump, is critical in the selection of the sampling time during the cleanup. The fines that flow with the formation fluids can be detected much easier when the NIR device is being rarified by the pump stroke pulses<sup>1</sup>. The failure of detecting such solids flowing into the tool can lead to cutting some internal seals possibly causing a pressure leak of the sample while pulling out of the hole.

In wells drilled with a water-based mud (WBM) we noticed that the amounts of carbon dioxide (CO<sub>2</sub>) and nitrogen (N<sub>2</sub>) are extremely elevated in sample bottles that contained both water and gas, while they show at normal levels in bottles that did not contain drilling filtrate. The elevated CO<sub>2</sub> or N<sub>2</sub> components spoil the PVT properties of the samples, and also lead to incorrect Specific Heat values, a property that determines the value of the produced gas.

Shell has developed very successful techniques that retrieve very low contaminated dry gas samples and very dry condensates in wells drilled with either WBM or synthetic oil-based mud (SOBM).

After describing how to obtain a sample with low contamination, we would like to discuss other properties that can be derived using WFT.

#### Uses Beyond Pressure and Samples

##### A/ Measuring Permeability, k

- Current Measurements Limitations

Permeability has always been a critical parameter in reservoir characterization. Current methods have serious limitations of scale and extrapolation to the actual permeability of the formation. While core measurements can lead to accurate results, uncertainties arise in parameters needed to make the core measurements under stressed conditions, such as effective stress calculations, tri-axial loading, aging period required for restoring native wettability and foremost of all, elevating the core cell to insitu reservoir temperature and pressure. Lab equipment limitations, and the safety constraints of handling live reservoir fluids or even refined oils at elevated temperature and pressure introduce an error, leaving the issue of proper representation of the actual insitu condition unresolved.

Other ways of measuring the permeability downhole require a production test with extended flow and shut in periods, only to get an average permeability of the flowing zones, an uncertainty in itself unless individual zones contribution to the flow rates are investigated.

##### • WFT Permeability

We propose the use of the WFT pressure transient analysis for accurate permeability measurements. While the measurement of existing techniques give us mobility (M) defined as the ratio of permeability to viscosity in md/cp

$$M = k/\mu \quad (1)$$

The reason the solution of the pressure versus time relationships produce "mobility" rather than permeability has to do with the fact that the radius of investigation of this technique only tests the invaded zone. In the invaded zone,

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the viscosity is neither that of the mud filtrate, nor the native fluid, but rather a mixture or an emulsion with solids in most cases, that has an unknown viscosity value. Therefore, when solving the diffusivity equations of pressure versus time, we arrive at a mobility term.

- **Proposed Method of Measuring Effective Permeability**

Our proposed method calls for performing a pretest before and after successfully obtaining a clean sample. This second pretest, performed after pumping some volume to the wellbore investigates a much larger radius than the typical 20 c.c. pretest, its derived mobility corresponds to a bigger rock volume filled with the reservoir fluids for which the viscosity can be measured or estimated. By substituting the viscosity in Eq. (1) the permeability is then resolved. In the case of single-phase flow, it represents the effective permeability of the rock, or the end point relative permeability at initial water saturation and it is considered the best representation of this in situ rock property, having the proper stressing, native fluids and no wettability issues.

Caution should be noted regarding the validity of the assumptions used in the solution of the partial differential equations of pressure versus time. These assumptions considered incompressible filtrate fluid drawn into the tool during the pretest. This is not valid if gas reservoirs are being tested, especially after the filtrate is displaced by gas after pumping. Corrections using psuedo pressures are then required to arrive at a correct permeability.

Figure 1 shows the graphical representation of the pre and post sample pressure testing technique.

One limitation to this technique is the ability to determine the correct flow regime in order to solve the diffusivity equation with the proper boundary

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conditions. Service companies test pressure time relationship with radial and spherical models with their interpretation packages, and determine the best matching fit to be the proper representation of the flow regime. In our verification tests we managed to match the radial flow model successfully with core plug measurements and well test measurements. However, when we tested it in fractured reservoirs, we found it to be not as representative, due to the physical limitation of the tester itself to see the fracture network in the area across the flowing probe. The Dual Packer module provided better results in this case.

The use of a correction factor derived from the comparison of the pre and post mobilities at the sampling spot and applying it to other "pressure stations only" derived mobilities did not lead to the correct permeability profile. This is mainly due to the variable skin damage and invasion profiles wrongly assumed to be the same.

Another situation where this technique will not work is when reservoir fines are mobilized during pumping out creating a worse skin damage at sampling time.

As different probe types have different geometrical correction factors, we found that the one that matched the core and well test results the most was the large diameter probe. The comparison included the Large Area Packer probes, Gravel Packed probes, Dual Packer probes and the Normal (small) Diameter probes.

#### B/ Formation True Static Temperature (FTST)

Formation True Static Temperature (FTST) is another critical input parameter used in casing cement design, proper PVT analysis, proper placement of subsurface safety valves, the need and proper design of insulated tubular, the design of concentrations of injected chemicals or inhibitors, the proper design of the flowing pipelines and the receiving facilities and other flow assurance issues amongst many other things. Production facilities curtailment due to wrong receiving temperature is a very common occurrence around the world. Incorrect prediction of temperature could result in costly improper design. This was the reason behind our drive to accurately predict if not measure the formation true static temperature.

#### Proposed Method of Measuring FTST Temperature

We have found that a single-phase clean formation fluid sample arrives at the sampling tool at the static reservoir temperature. The WFT provides multiple gauge temperature readings. These readings may differ due to heat interference from internal electronics. As a matter of fact, there is only one gauge that reads the true formation temperature, and only when a clean single-phase sample is collected.

Consider the Prandtl Number<sup>3</sup> (Pr), defined as the ratio of the Momentum Diffusivity ( $\nu$ ) to the Thermal Diffusivity ( $\alpha$ );

$$Pr = (\nu/\alpha) \quad (2)$$

Where;  
Momentum Diffusivity ( $\nu$ ) is defined as the ratio of viscosity  $\mu$  to density  $\rho$ ;

$$v = \mu / \rho \quad \text{cp/(gm/cc)} \quad (3)$$

Thermal Diffusivity ( $\alpha$ ) is defined as;

$$\alpha = \kappa / c_p \quad (4)$$

where,

$\kappa$  is the thermal conductivity,  
and  $c_p$  is the heat capacity

$P_r$  value is 7.39 for water and 13.7 for oil. This means that if water at a colder temperature invades a porous media, it will cool a bigger distance from the wellbore than SOBMs would have cooled. It also suggests that oil filtrate would need to invade a lot deeper to achieve comparable cooling to WBM system. To explain these phenomena better, consider two fronts, a temperature front and a saturation front. What the Prandtl Number suggests is that the saturation front is deeper than the temperature front for water filtrate invasion systems, and even deeper for oil filtrate invasion systems.

In our case, the goal is to collect a clean fluid sample using WFT. A clean sample by definition has to come from beyond the saturation front - the edge of the invaded zone, for it to be uncontaminated. Since the saturation front is beyond the temperature front, therefore this sample has to arrive at its native static temperature, so long as the fluid is flowing single phase. If water filtrate is flowing with oil, the temperature can be lower. In the case of gas, after a short period of cooling due to the Joule-Thompson<sup>3</sup> effect, more gas arrive at its native temperature overcoming this cooling effect and ultimately stabilizing at the formation true static temperature. In wells drilled with SOBMs, due to its miscibility with

the formation oil, the single-phase flow is achieved a lot sooner, then the temperature will stabilize before a clean sample is obtained. It is very important to see a stable temperature before sampling starts.

Figure (2a) shows the relative positions of the temperature front and the saturation front while sampling.

Figure (2b) shows the verification of such technique with a real Gulf of Mexico example. In this example, a producing TLP field was to be complemented with a satellite subsea development. Assuming the temperature of the producing field is the same as the new satellite field, only seven miles away, it should be hot enough not requiring tubing insulation. The WFT derived temperature suggested that the satellite field static temperature is 30 degrees cooler and thus requires heat insulation of the production tubing, a \$30 million cost. In order to resolve this costly difference, the producing field had an opportunity to measure its temperature using the new WFT technique during sampling some reservoirs in new infill-drilled wells. The temperature using the WFT technique matched the downhole gauges static temperatures of producing wells as well as the cased-hole temperature surveys during wells shut-in, within an accuracy of a degree Fahrenheit. This proved the FTST measured by WFT technique is correct and confirmed the decision for the subsea development to insulate the production tubing. This was decided three years prior to first oil production. Three years later, when these subsea wells produced, their static temperatures matched the WFT



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measured temperatures exactly as shown in Figure 2b.

We have made some interesting observations on this issue:

- In very deep wells drilled with SOBM and logged with the WFT after a couple of days without circulation, the temperature observed during pressure stations was very close to the formation static temperature. We consider this to be a special case due to the very shallow temperature disturbance caused by SOBM, and the long time before measuring the temperature.
- This technique measures lower static temperatures in wells drilled with WBM, due to the fact that hydrocarbon samples are collected with some water filtrate flowing with it, to be separated later. As noted before, if the formation fluid is not flowing single phase, the temperature is not static.

Lastly, while we believe in the validity of the technique, as it was verified in multiple developments around the world. The physical explanation with the Prandtl number is an attempt to explain such phenomena.

#### C/ PVT Properties Downhole Prediction Using NIR Devices

The concept of predicting PVT properties like GOR, API, molecular weights using WFT NIR devices were discussed first by Hashem et al.<sup>1</sup> in 1997. Other attempts followed by Van Dusen et al.<sup>5</sup> At the time, as can be seen

on the data set published in these papers, these techniques were limited in their accuracy resulting from a scatter in the data set and a low regression confidence. We have looked into this scatter phenomenon, understood its reasons and found a solution to it. Once a quality control process was instated, regressions were improved allowing the correlations for other parameters to be developed. We introduced new relationships with Viscosity ( $\mu$ ), Formation Volume Factor (FVF), Compressibility, Saturation Pressures ( $P_{sat}$ ), Molecular Weight (Mwt) and Density ( $\rho$ ) amongst a long list of conventional PVT report results.

#### Better PVT Correlations

The scatter of the points and low regression confidence in earlier efforts were mainly due to two main reasons, the first had to do with alterations of the downhole sample while sampling, while coming out of the hole, and while transferring the sample to transportable bottles. Poor transfer of downhole samples to transportable bottles is the main reason causing different properties, even when all samples come from the same depth. This is due to the alteration of the sample caused by depressurization due to cooling effects while pulling out of the hole. The pressure drop results in the segregation of the reservoir fluid sample in the mother bottle, and when it is transferred to sub-bottles lighter fluids get transferred first, then heavier fluids follow in later sub-bottles, leading to different PVT properties from the same sample depth.

We solved this problem by using agitating rings or balls in downhole sampling bottles together with longer reconditioning period (heating and

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rocking) of the bottles at surface before transferring their contents. The use of nitrogen compensated bottles was found to deliver the best quality samples.

The second reason for WFT sample misrepresentation is due to flashing the reservoir fluids while sampling due to excessive pressure drawdown. The introduction of "Low Shock Sampling" solved that problem. This technique allows the backside of the sample chambers and the pump to be subjected to hydrostatic pressure. The only way to move reservoir fluids is by pumping them at or above hydrostatic pressure. The reservoir fluids are then elevated and the chance of flashing them is minimized. Meanwhile the formation is subjected to a much-reduced draw down pressures preventing sand failures. Furthermore, after filling the sample chamber we continue to overpressure the sample up to the pump maximum delivery pressure, some 4000 psi above reservoir pressure. This elevated pressure helps raising the starting point of the cooling effect depressurization, leading to a better representative sample at the surface.

These two techniques solved the problems of reported differences in PVT properties of WFT samples.

In our correlations, we compared the term "Crude Optical Property, COP" described by Hashem et al. to the PVT properties of the samples that utilized the proper handling and sampling techniques just described. The COP is defined as;

$$COP = HOP / (OD8 - OD7) \quad (6)$$

While HOP "Hydrocarbon Optical Property" is defined as;

$$HOP = 20 - \text{SUM}(OD0-3) \quad (7)$$

The values of the NIR spectrum used to calculate the term "COP" were also refined, they were improved by better time picks, and more averaging of values rather than applying an instantaneous value. We plotted the "COP" values against the different PVT properties of only consistent valid fluid samples using the techniques described and that contained very low mud filtrate contamination.

This refined the results of the correlation with the NIR response, and resulted in much better regression coefficients. Figures 3a, 3b, 3c, and 3d show some of the new improved correlations. The correlations were used in different basins around the world, and proved to be conditionally valid. Each region may have its unique correlations.

For samples taken in wells drilled with WBM, the water causes scatter of Optical Density channel 7 (OD7) due to the interference of the water absorbance spectrum with the oil over this range.

OD7 is normally very close to zero for most hydrocarbon NIR spectrums. To solve the water interference issue, we substituted the value of OD7 by zero. So the HOP equation (6) for the WBM special case is;

$$COP = HOP / OD8 \quad (8)$$

This makes the PVT properties predictions available for samples acquired in wells drilled with WBM.

The ability to predict properties like the hydrocarbon density and viscosity accurately is very useful specially if used

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as an input to other petrophysical interpretations such as NMR logs or to determine the permeability with the technique described in section A/ of this paper. Also in cases where the formation thickness is not enough to obtain a representative fluid pressure gradient, this technique provides a very valid alternative from its density correlations.

Another use of the technique is for geological correlations as a downhole finger print technique. We have used this technique successfully in solving some very complex turbidities sand correlations. In some cases it indicated discontinuities of what seemed to be same sand members. A recent article in the Oilfield Review<sup>5</sup> highlighted this technique and illustrated it with an example.

#### D/ PVT Prediction Using Fluid Pressure Gradient

As we mentioned in the previous section, once the quality of reservoir fluid sample was perfected using the previous methods of acquisition and handling, the fluid properties can be correlated to few parameters. We discussed the Optical Density correlations, now we introduce the PVT correlations with the insitu fluid density. We correlated the density in (gm/cc) or as fluid pressure gradient in (psi/ft). We can convert accurately reservoir fluid density to pressure gradient as long as the sample is valid with a representative density, and the pressure gradient is obtained using lots of pressure points and coefficient of regression ( $R^2$ ) of 0.999 or better. In these situations, we can match accurately the insitu fluid density as measured in the PVT lab to

that obtained from the pressure gradient. Figure 4a, 4b, 4c, and 4d show some of these regressions, note the high confidence of the correlations and their wide validity from dry gas to heavy oil.

In these figures, Group A represents mostly Gulf of Mexico samples, while Group B represents Norway Samples. Also note that the correlations are first order relationships and not polynomials like the COP derived ones. This suggest that different basins may have the same general relationship but with different coefficients. A good example to that is the insitu Density Vs GOR relationship, where we plotted the properties of Norwegian hydrocarbon that was published in Van Dusen et al.<sup>4</sup> and they fit the same exponential relationship found for the GoM hydrocarbons, but with a different coefficient. This helps in a way that we can quickly build a regional correlation for West Africa for example, without having to wait until a big statistical data set is collected like in the GoM.

The properties prediction is more confident when the two independent (COP and Density) methods agree. We also used this technique when we wanted to get a good idea of the initial reservoir fluid properties prior to production, by looking at their pressure data set obtained prior to low shock sampling.

#### Final Remarks

We have managed to successfully utilize the WFT to obtain rock and fluid properties, we have mentioned only a few of these utilities in this paper. Some of the other techniques that we have not discussed due to time and space constraints are the ability to get all what

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was proposed above but through casing. Another is the successful acquisition of dry gas samples in wells drilled with SOBM. Similarly, water samples in wells drilled with WBM without the use of chemical tags. Finally, we developed techniques to get quality representative samples of very high viscous oil that conventionally cannot be sampled by WFT due to its high viscosity. All these techniques make the WFT a viable and critical tool in our evaluation programs. As mentioned before, with the proper PVT properties, permeability and pressures we can then predict flow rates successfully and thus substitute production tests, but not answer the reservoir extent question.

The techniques mentioned in this paper are all Shell's protected techniques, and are currently licensed and offered commercially through the different wireline contractors.

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Attachment 1

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PVT Property	Wireline Sample	Flowline Results
GOR (SCF/STB)	1644	1638
API Gravity	40.5	39.2
Molecular wt	66.5	64.95
Density (gm/cc)	0.68	0.66
Viscosity (cp)	.405	.359
Saturation Press. "P <sub>sat</sub> " (psi)	4552	4822
FVF-B <sub>oi</sub> (STB/RB)	1.9215	1.928
Compressibility (psi <sup>-1</sup> )	8.58 x10 <sup>-6</sup>	8.08 x10 <sup>-6</sup>
CO <sub>2</sub> (mole%)	0.14	0.148

Table 1. Comparison of PVT Results, Between WFT Sample and Flowline Sample.

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**From:** Roosch, Jan-Willem JW SIEP-EPB-P  
**To:** Van Driel, Peter P SIEP-EPB-P; Van Langeveld, Petra PH SNV-CSCF/3  
**CC:**  
**BCC:**  
**Sent Date:** 2002-04-03 07:35:20.000  
**Received Date:** 2002-04-03 07:35:24.000  
**Subject:** FW: Der Unvollendete  
**Attachments:** Roadmap Detail.doc

Peter, Kees

This is the latest summary of major (Proved) reserves issues for this year.  
Grateful any insights/comments.

JW

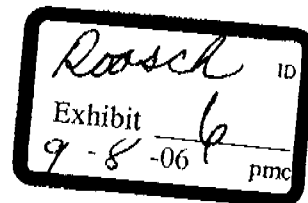
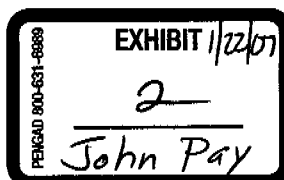
-----Original Message-----

**From:** Roosch, Jan-Willem JW SIEP-EPB-P  
**Sent:** 3. april 2002 07:47  
**To:** Nauta, Jaap J SIEP-EPB-P  
**Subject:** Der Unvollendete

Jan Willem D. Roosch

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Confidential

## Reserves Replacement 2002?

EXCOM wishes to have a 'road map' to a 100% (Proved) reserves replacement ratio. The March latest estimate, including the OU's/NVO's and risked strategic options was about 600 mln boe short of 100% replacement ratio. Below is a catalogue of the major opportunities and threats.

### Australia

Sunrise FLNG maturation (incl. FID) is expected (if successful) in 2003.  
Gorgon may be partly developed via NW Shelf, subject to Train 5 (Guangdong)  
Most of the Gorgon Proved reserves (550 mln boe) however seem 'stranded'.  
Any Sunrise booking to help 'manage' Shell Australia stranded gas exposure.  
Sunrise size ca. 250 mln boe  
Vincent - Enfield downside probably resolved in view of positive appraisal result.  
Assume zero for this year.

### Nigeria (SPDC)

Target/LE zero  
Train 4/5 FID reached. Project gas to be matured.  
T4/5 gas projects to 'manage' Proved oil (and gas) reserves exposure.  
Assume zero can be maintained (to be confirmed by SPDC and EXCOM).

### Nigeria (SNEPCO)

Target + 105.7 mln bo  
LE + 45 mln bo  
Bonga Main possibly overbooked, review pending more field data.  
Erha appraisal result was disappointing and project economics may put Shell funding in doubt. Assuming that the JV elect to proceed with the project it is recommended that Shell continues to account for (Proved) reserves, even if Shell funding is unlikely, as divestment is an option (which is then the logical de-booking trigger).  
Planned audit visit for September this year. It may be wise to postpone 1 year.  
Technical/commercial maturity Bonga SW uncertain, but it seems attractive to use any booking here to manage potential downside on Bonga Main and Erha.  
On balance there is significant downside, but zero change may be defensible another year. To be further explored.  
Assume - 45 mln bo

### Shell Angola

Target/LE + 33.3mln bo (further review end-April)  
BP very aggressive, determined to take a (positive) funding decision this year.

### NAMIBIA land based LNG&Power

Target/LE + 124.8 mln boe  
Project reserves needed = 5 tcf. (900 mln boe)  
Current 'Proved (P85) recoverable volume' 1.2 tcf?  
Appraisal wells (2) underway, to bring Proved to 2.25 tcf (Shell share) 387 mln boe  
- VAR3: q4 2002 (a road map towards technical and commercial maturity)  
- VAR4: q2 2003 (technical and commercial maturity)  
- FID: 30/06/03  
SO LE should be zero, causing downside of - 125 mln boe

13-10-2004

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Shell Kazakhstan

Kashagan Phase 1 to cover 160 mln bo (Expectation, Proved 120 mln bo?)

Maturity 2002 likely. Milestones:

- FDP approval: ?
- VAR4: ?
- FID: ?

Upside of + 120 mln bo

Shell Sakhalin

Need FID (LNG or Oil only) to book. Roadblocks to pass: (1) Cost, (2) Russian approvals and (3) Sales contracts. Project review in June.

Maturity 2002 envisaged:

- VAR4: 3rd - 7th June 2002
- Partner decision: 21st June 2002
- CMD: 25th June 2002
- Conference (=FID): 11<sup>th</sup> December 2002

Major Project Review 13/14 June

LNG Option 40% of 10 tcf times Shell share (55%) = 2.2 tcf = 378 mln boe

Oil only option?

Maximum upside of + 378 mln boe

SO Abu Dhabi - Whale

900 mln bo unrisked project (is 28% share)

Probability of contract award in 2002 now 50% and 50% in 2003

POS 30% to get award of full 900 mln bo, POS 70% to get 450 mln bo.

In LE for 150 mln bo. So:

Upside of + 300 mln bo, but downside - 150 mln bo.

Bidding in April, no further control after that. Relationship issue.

SO Russia - Salym

Development of fully appraised W. Siberian oil field

230 mln boe Expectation (Proved 100 - 150?)

Probability of FID 2002 = very small now (so effectively zero)

In Summary, taking all upside unrisked:  
(mln boe)

LE Additions February 2002:	874
Nigeria (SNEPCO)	(45)
Namibia (KUDU)	(125)
Kazakhstan (Kashagan)	120
Russia (Sakhalin)	378
Abu Dhabi (Whale)	300
Total potential	1502 = 108 % RRR

13-10-2004

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Information Item: Sponsored by MGDWV

19 FEB 2002

**Note For Information**  
**CMD 11<sup>th</sup> February 2002**  
**EP Hydrocarbon Resources Update 1/2002**

This note summarises the end 2001 Group resources situation, cleared by external audit, and in part reported in the Q4'01 and FY'01 press release. All numbers include the effects of A&D activities unless otherwise indicated.

**Summary**

The total barrel of oil equivalent proved hydrocarbon reserves replacement ratio (RRR) for 2001 was 74% (52% excluding A&D), leading to a proved RRR three year rolling average, including AOSP additions (mining reserves) in 1999 of 81%, 101% excluding A&D). The 2001 RRR is below the results quoted by our main competitors (BP 191%, XOM 110%), and highlights a portfolio that is under-performing in terms of adding reserves through exploration and maturing existing scope. Future RRR performance over the plan period relies on the delivery of 'big ticket' bookings, e.g. Kudu, Sakhalin LNG and Kashagan.

Our overall resource base contains some 20 bln boe of proved reserves (c.f BP 16 bln boe, XOM 22 bln boe), some 13 bln boe of expectation reserves (of which some 8 bln boe currently fall outside of license expiry), some 17 bln boe of discovered Scope for Recovery (SFR). Our total discovered resources base is thus ca. 50 bln boe (c.f. XOM 70 bln boe) and additionally we have some 27 bln boe of undiscovered SFR. Together with any volumes resulting from new exploration licenses and acquisitions these volumes represent a significant opportunity to increase our proved reserves replacement performance and the EP organization is being geared up to tackle each and every element.

**Reserves and Resources****2001 Actual Additions (See Table 1)**

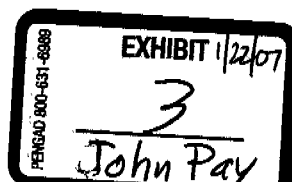
The Group proved reserves base at end 2001 is 19.1 bln boe (19.7 incl. AOSP) and remains split at 50:50 oil/gas. The 2001 proved RRR of 74% amounts to a reserves addition of 1020 mln boe, which in Figure 1 is broken out by type of revision;

- 360 mln boe of Discoveries & Extensions, mainly in USA, UK and Brunei
- 350 mln boe of Revisions & Improved Recovery, mainly Netherlands, Denmark and Sakhalin offsetting negatives from Canada (50 mln boe based on field performance), New Zealand (50 mln boe based on studies on Maui field) and Oman Gisco (110 mln boe as a consequence of the renegotiation of the GISCO contract and acceleration of repayments)
- 310 mln boe of Acquisitions & Divestments, mainly Fletcher and Pinedale.

The proved oil RRR is 65%, taking the 3 year average to 102% including mining reserves and 77% without, and the proved gas RRR is 86% contributing to a 3 year

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average of some 50%. During 2001 there were no changes to the reserves for AOSP. Including AOSP, the three year average proved boe RRR is 81% (101% excl A&D) and excluding AOSP, the equivalent numbers are 67% (86%).

The Total Resource base (the sum of expectation reserves and commercial discovered SFR) has increased by 2.7 bln boe to 49.4 bln boe (see Table 2); this includes a 1.3 bln boe addition from Venezuela Urdaneta West which falls outside of the current licence period. It should be further noted that total resources include some 1.1 bln boe from the consolidation of Sakhalin.

sfr The Unit Finding and Development Cost (UFDC) for 2001 defined as the exploration and development cost incurred (\$6.1bln) divided by Group oil and gas additions, excl. purchases and sales, (0.73 bln boe) now stands at \$8.3/boe for the year 2001, and \$4.8/boe on a 3-year rolling average base (up from \$3.50/boe in 2000, see Figure 2). An increase in UFDC was forecast at the time of developing the Business Plan in 2000 when it was recognised that there would be a lag between stepping up capital spending and the increase in subsequent reserves bookings. Together with the lower than planned bookings in 2001 this impacts directly on our competitive position on this indicator where, up until this year, we were the leading player. The Unit Finding Cost (funding share) is \$1.0/boe yielding a 3-year average of \$0.62/boe, reflecting a continuation of an improving trend. Unit Finding Costs on a proved reserves additions basis are \$ 3.8/boe.

#### Comparison versus Business Plan

The EP scorecard target for 2001 was 80% (excl. A&D and strategic options), or 1120 mln boe at target production. The actual addition excl. A&D and strategic options was 710 mln boe, or 52% RRR at actual production. The main contributors to the lower than planned RRR are detailed in Figure 3.

None of the strategic options associated with reserves bookings in 2001 materialised, e.g. Saudi Gas, T2T, Salym, Bangestan, China, Libya.

Total SFR maturation to expectation reserves over 2001 was 0.92 bln boe or 2.2% of the commercial SFR.

#### Exposures

##### Securities and Exchange Commission (SEC) Alignment

Recently the SEC issued clarifications that make it apparent that the Group guidelines for booking Proved Reserves are no longer fully aligned with the SEC rules. This may expose some 1,000 mln boe of legacy reserves bookings (e.g. Gorgon, Ormen Lange, Angola and Waddenzee) where potential environmental, political or commercial 'showstoppers' exist.

##### End of License

In Oman PDO, Abu Dhabi and Nigeria SPDC (18% of EP's current production) no further proved reserves can be booked since it is no longer 'reasonably certain' that the proved reserves will be produced within license. The overall exposure should the OU business plans not transpire is 1,300 mln boe. Work has begun to address this important issue.

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## **Appraisal**

### **Historical Perspective**

In 1999 - 2001 the proved reserves additions have not fully replaced production and the 2001 3-year rolling average RRR's no longer benefit from the recent 'bookings rich' period of 1996-98 (see Figures 4/5, reflecting performance with and without the effects of A&D and showing the impact of AOSP). Over that period, substantial proved reserves additions were realised from major discoveries (Australia, Gorgon, SNEPCo (Bonga), total 1.2bln boe), major revisions (Venezuela 0.3mln boe) and new business (Oman GISCO, 0.4bln boe). In addition, in 1998 significant bookings were made by bringing proved reserves closer to expectation in mature fields (total 1.2 bln boe) - this action brought us to industry standard from a much more conservative position.

### **Competitive Landscape**

The Group RRR of 74% is low in comparison with competitors who all posted RRRs in excess of 100% (Figure 6). The competitors are able to draw benefit from portfolios which, following the rounds of industry rationalisation, appear to offer wider choices in key exploration and scope maturation targets.

### **2002 and Beyond: Outlook for RRR**

The outlook for Group reserves replacement in 2002 and beyond remains challenging (see Figure 7);

- We can expect fewer additions through the base plan, because of OUs affected by 'end of license', OUs with limited remaining exploration potential and the challenge to find ways to increase expectation reserve levels in mature fields.
- And an increased reliance on strategic options and other big-ticket bookings. Control on timing of these bookings is an issue, as they are commonly occur in frontier areas (Kashagan), face fierce competition for markets (T4/T5, Sakhalin LNG), rely on emerging technologies (Kudu, SURE), or are in areas with limited control (Saudi, Whale). The subsequent reserves booking profile may be "lumpier" than in the past and these major bookings will require additional steer to ensure delivery of new reserves within the tighter SEC framework.

### **Actions taken**

In Q4 2001 and Q1 2002 a number of actions have been initiated to address this emerging issue;

- even greater focus is being placed on succeeding in exploration, a key challenge is to focus on the maturation of our 27 bln boe of undiscovered scope for recovery
- similarly EP is refocusing the organization to reinstate Technical and Operational Excellence across the whole of its core operations; hydrocarbon resources maturation is a key element of this drive
- EP is looking again at the opportunities to accelerate the maturation of our 17 bln boe of discovered scope for recovery and specifically with GP looking at the opportunities to monetize gas SFR

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- Stepping up the drive to extend licenses e.g. in Abu Dhabi, Nigeria, Brunei, Oman and open up the opportunity to move the 8 bln boe expectation reserves which currently fall outside of license expiry back into our within license resource base and ultimately move to proved reserves.

### **Conclusion**

Our reserves replacement performance over the past few years clearly illustrates the emerging problems with our resource base and is becoming a source of competitive disadvantage. Over the plan period, the challenge will be to secure sufficient volumes from major bookings to supplement additions from a base plan portfolio and ensure that existing exposures, if they transpire, are adequately offset.

However, we do have some nearly 50 bln boe of SFR and expectation reserves currently outwith license in our overall resource base which presents a significant opportunity. We are refocusing our efforts on exploration and will pursue more aggressively the transfer from SFR to reserves but this will not be sufficient to reverse the trends – success in major strategic options in MRH's or a major acquisition is necessary.

Electronically signed by MGDWV

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Table 1 : Summary of 2001 Reserves/Resources Replacement

proved RRR	Production	1 year 2001				3 year 1999-2001				2002 Target		
		Ind A&D		Ext A&D		Ind A&D		Ext A&D				
		Ind AOSP	Ext AOSP	Ind AOSP	Ext AOSP	Ind AOSP	Ext AOSP	Ind AOSP	Ext AOSP			
Oil	0.71	66%	66%	66%	66%	102%	77%	150%	106%	91%	49%	
Gas	0.57	66%	66%	42%	42%	30%	50%	38%	55%	113%	86%	
Total BOE	1.32	74%	74%	52%	52%	81%	67%	101%	86%	105%	57%	

Additions bin boe	Production	1 year 2001				3 year 1999-2001				2002 Target		
		Ind A&D		Ext A&D		Ind A&D		Ext A&D				
		Ind AOSP	Ext AOSP	Ind AOSP	Ext AOSP	Ind AOSP	Ext AOSP	Ind AOSP	Ext AOSP			
Oil	0.71	0.53	0.33	0.47	0.47	0.82	0.63	1.05	0.88	0.78	0.41	
Gas	0.47	0.49	0.48	0.34	0.34	0.28	0.28	0.31	0.31	0.80	0.40	
Total BOE	1.38	1.02	1.02	0.72	0.72	1.12	0.92	1.38	1.19	1.42	0.81	

Resources (bin boe)	2000	2001	Delta
SFR (core discovered)	14.1	18.7	
Expectation (incl proved)	32.4	32.7	
Total	46.7	49.4	2.74
less Undeclared West (license)			1.28
Resources added (net)			1.46
Production			1.38
Resources added (gross)			3.34

Reserves (bin boe)	Proved	Developed
Balance 31.12.2000	20.1	9.0
Additions	0.36	
Extensions	0.35	0.17
Revisions	0.31	
A&D		1.02
Transfer to Dev		
Production	1.02	1.19
Balance 31.12.2001	19.7	8.8

Table 2: Total Resource Base as at 31.12.01

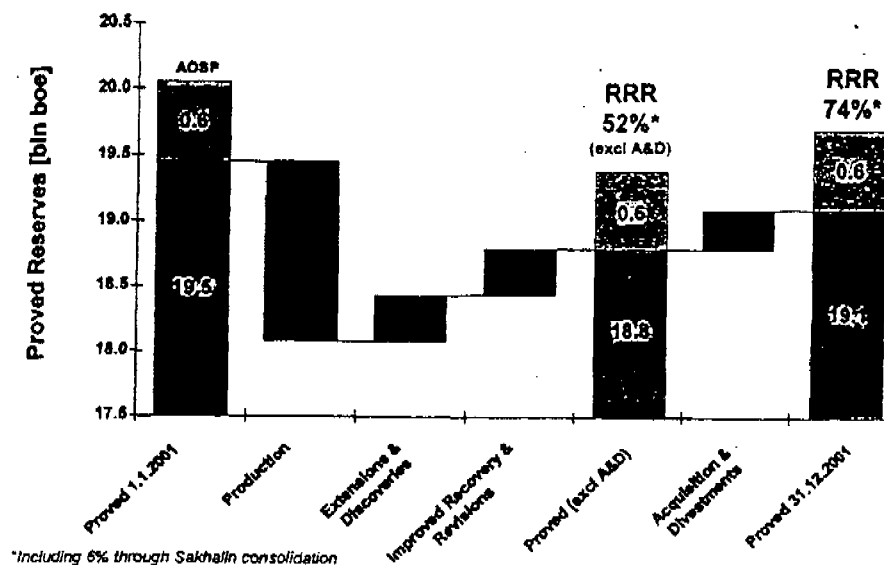
bin boe	Oil & NGL	Gas	Total
Proved Developed	4.3	4.4	8.8
Proved Undeveloped	5.7	5.2	10.9
Total Proved	10.1	9.6	19.7
Expectation minus Proved	6.5	6.2	12.7
Total Expectation	16.9	15.8	32.7
(of which in license)	(12.7)	(12.0)	(24.7)
SFR			
Proved techniques	7.9	5.9	13.8
Unproved techniques	2.7	0.2	2.9
Total Resources	27.5	21.9	49.4
Undiscovered	15.6	11.9	27.5
Non commercial	2.4	2.6	5.0
Total Volume	45.5	36.4	81.9

Table 2 Total resource base at 1.1.2002. AOSP Mining reserves are included

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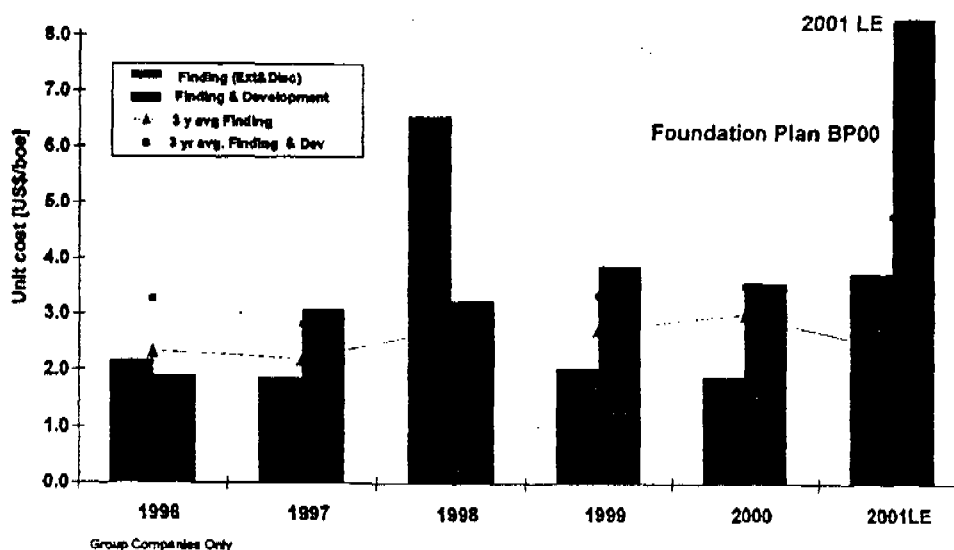
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Figure 1: Total BOE Proved Reserves 2001



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Figure 2 : Finding and Development Cost



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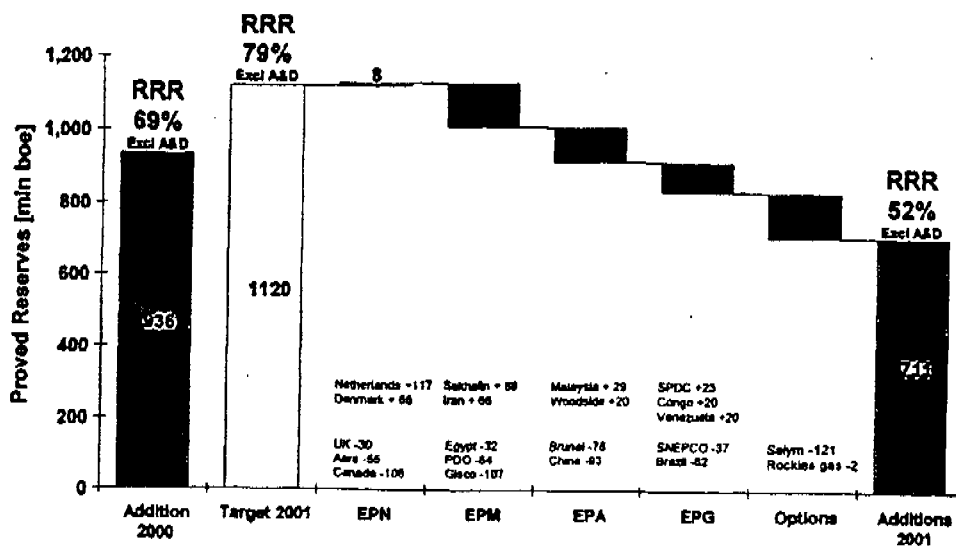
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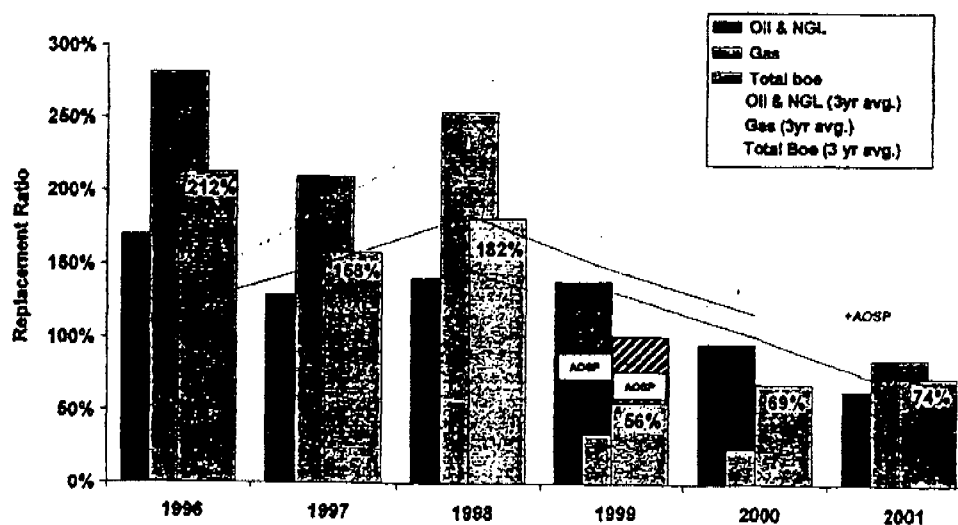


Figure 3 : 2001 Reserves Actual versus Target



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Figure 4 : Proved RRR (incl A&amp;D)



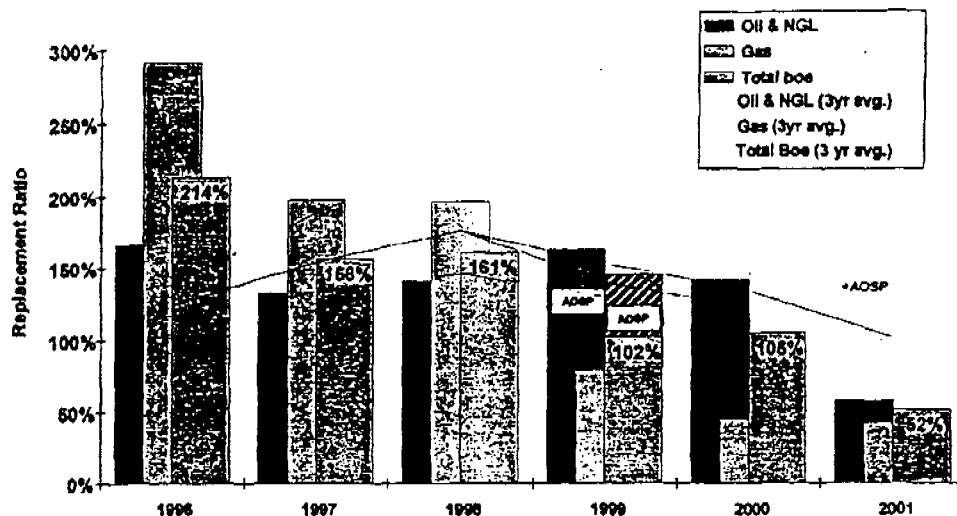
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Figure 5 : Proved RRR (excl. A&amp;D)



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Figure 6 : Majors Proved Reserves Replacement Ratio [boe]



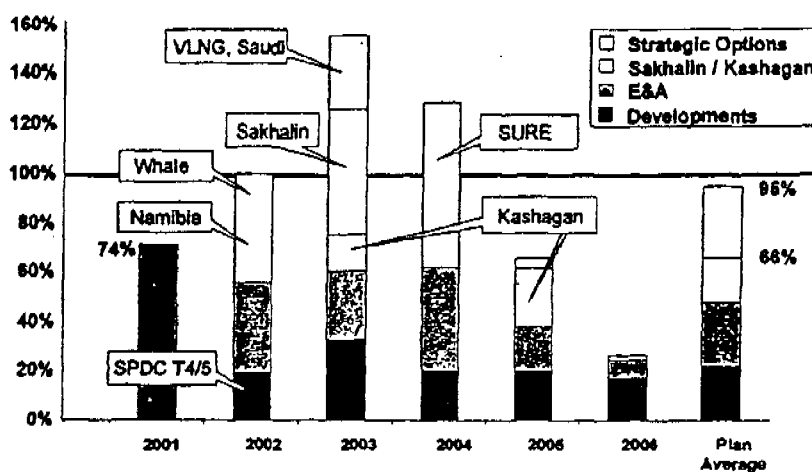
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**Figure 7 : BP'01 Planned Reserves Replacement**



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**Unknown**

**From:** Johnson, Dave SDA-OE on behalf of Johnson, Dave SDA-OE  
**Sent:** 19 September 2002 09:30  
**To:** Pay, John JR SIEP-EPB-P; Frost, David DB SEPI-EPA  
**Cc:** Bell, Sarah SDA-OE/21; Faulkner, Andrew A SIG-GPA  
**Subject:** Australian Gas Reserves

**Contacts:** Produced By Microsoft Exchange V6.0.5762.3

John / David

Sarah forwarded me a copy of your note of yesterday on the above and I thought we should respond not only with comments on your note (attached) but also to share a couple of recent developments.

Firstly, Sarah has, in the last few days, completed two Notes for Information on both the SDA reserves bookings for Gorgon and for NWS. I have circulated these notes to our management team for comment and had intended to pass copies of both papers to you next week. These papers document the history of these reserve bookings and aim to provide a factual basis for discussion of SDA resource categorisation in the upcoming ARPR 2003 process. I now attach copies of the draft papers and would welcome your input, especially with regard to interpretation of the updated reserves guidelines. I must stress, however, that I am not at this stage, looking to make a decision on the future categorisation of these volumes and would ask that you give Tim & myself the opportunity to incorporate your input before anything is passed onwards to Walter.

Secondly, I presented the background to these bookings to both Walter and Malcolm Brinded yesterday morning. Both MD's now understand the history and categorisation of these volumes. Malcolm commented that had Gorgon volumes been currently classed as SFR, we would not currently be able to reclassify these volumes as reserves. However, given that the booking had already occurred and given the planned activities in the first half of next year, it was probably not appropriate that they be de-booked just now. With the concurrence of both MD's I wish to solicit your opinions before any final decision is taken for the ARPR 01.01.03.

As I'm away overseas next week, please contact Sarah if you've any immediate queries. I look forward to hearing from you.

Cheers

Dave



Australia Gas  
NFF\_sarah.ZIP



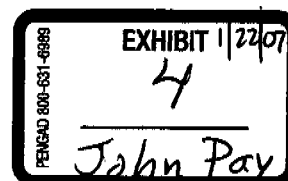
Gorgon Field  
Resource Categori...



NWS Resource  
Categorisation - ...

David A. Johnson  
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JV Operations & Exploration

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Email: david.a.johnson@shell.com.au

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Incoming mail is certified Virus Free.  
Checked by AVG anti-virus system (<http://www.grisoft.com>).  
Version: 6.0.567 / Virus Database: 358 - Release Date: 24/01/2004

EPB-P

18 September 2002

## Note For File

### Australia Proved Gas Reserves

Following the award of the China Guangdong LNG supply contract to North West Shelf LNG, the question arose as to the impact on EP gas reserves in Australia.

There is no impact of this deal on ~~total~~ 100%-proved gas reserves in Australia. All North West Shelf EP ~~technical P85~~ proved gas reserves (excluding Gorgon) are already considered to be proved. Although contracts have not been signed which cover the entire NWS resource base, the total economically producible volume is considered to be reasonably certain of being sold and thus commercial (and technical) maturity requirements for reserves bookings as specified in the Group Petroleum Resource Volume Guidelines are deemed to be satisfied. This methodology was sanctioned during the latest SEC reserves audit carried out in October 2000.

committed to contract. Under the recently awarded CLNG venture, CNOOC will be entitled to a percentage, currently ~5%, of NWS reserves, which will be divested equally from the current six NWS JV partners. Upon finalisation of this contract, and subsequent payments for the equity, SDA will be required to reduce its equity share of proved reserves booking by the appropriate percentage. Currently this approximates to a reduction of ~0.2 Tscf Shell direct share proved reserves. Similarly a reduction in indirect proved volumes will result from the divestment of Woodside equity to CNOOC.

The contract status at the end of 2001 is summarized in Attachment 1. SDA advises that the Guangdong deal and other events will have changed the contractual situation, which is currently under review. Any changes will be reflected at the 31.12.2002 ARPR. Train 5 volumes are likely to be included as committed volumes, but at the expense of Train 1-3 and domestic gas extensions. Regardless, the range of technical reserves for the Australian subsurface assets (as defined by the Proved and Expectation figures) straddles the volumes that are considered committed to contract. As such, any adjustments to the contractual situation are unlikely to affect the EP (technical) reserves situation, apart from the divestment to CNOOC as described above.

Attachment 2 provides a summary of the recent changes in proved gas reserves in Australia. Substantial proved reserves additions were made in 1996, and 1997, and 1998 principally in the Gorgon, Perseus and North Rankin fields. Woodside has no share of Gorgon, which was first booked as proved reserves in 19987 (wrong in attachment 2 - not 1997?) in the expectation that project sanction and sales agreements were imminent with the Korean market. As a result of the current market uncertainty, Gorgon volumes were defined as uncommitted for the ARPR 1.1.2002. The proportion of reserves committed to contract was increased in 2001 following review of assurances that the volumes would be brought to market (see above and Attachment 1).

## Attachment 1

## Australia Gas Reserves: Contract Status

EPB-P estimates of the status at 31.12.2001, based on information supplied by SDA:

Contract Billion Nm <sup>3</sup> at 9500 kcal/Nm <sup>3</sup>	Note	100%	Shell share		Total Shell
			Direct SDA	Indirect Woodside	
Domestic Gas Contracts	a	66.0	10.4	4.6	15.0
LNG Contracts	a	101.3	16.0	7.0	23.0
Trains 1-3 Contract Extensions	b	248.2	39.2	17.2	56.3
Domestic Gas Contract Extensions	b	63.3	10.0	4.4	14.4
Train 4	ab	136.4	21.5	9.4	31.0
Wedge	b	7.0	1.1	0.5	1.6
Methanex	b	51.4	8.1	3.6	11.7
Total committed to contract			106.4	46.5	152.9
As reported at 31.12.2001 (ARPR)			106.4	46.5	152.9
Excluding Gorgon:					
ARPR Proved Reserves (technical)			94.7	42.9	137.6
ARPR Expectation Reserves (technical)			116.1	53.0	169.0

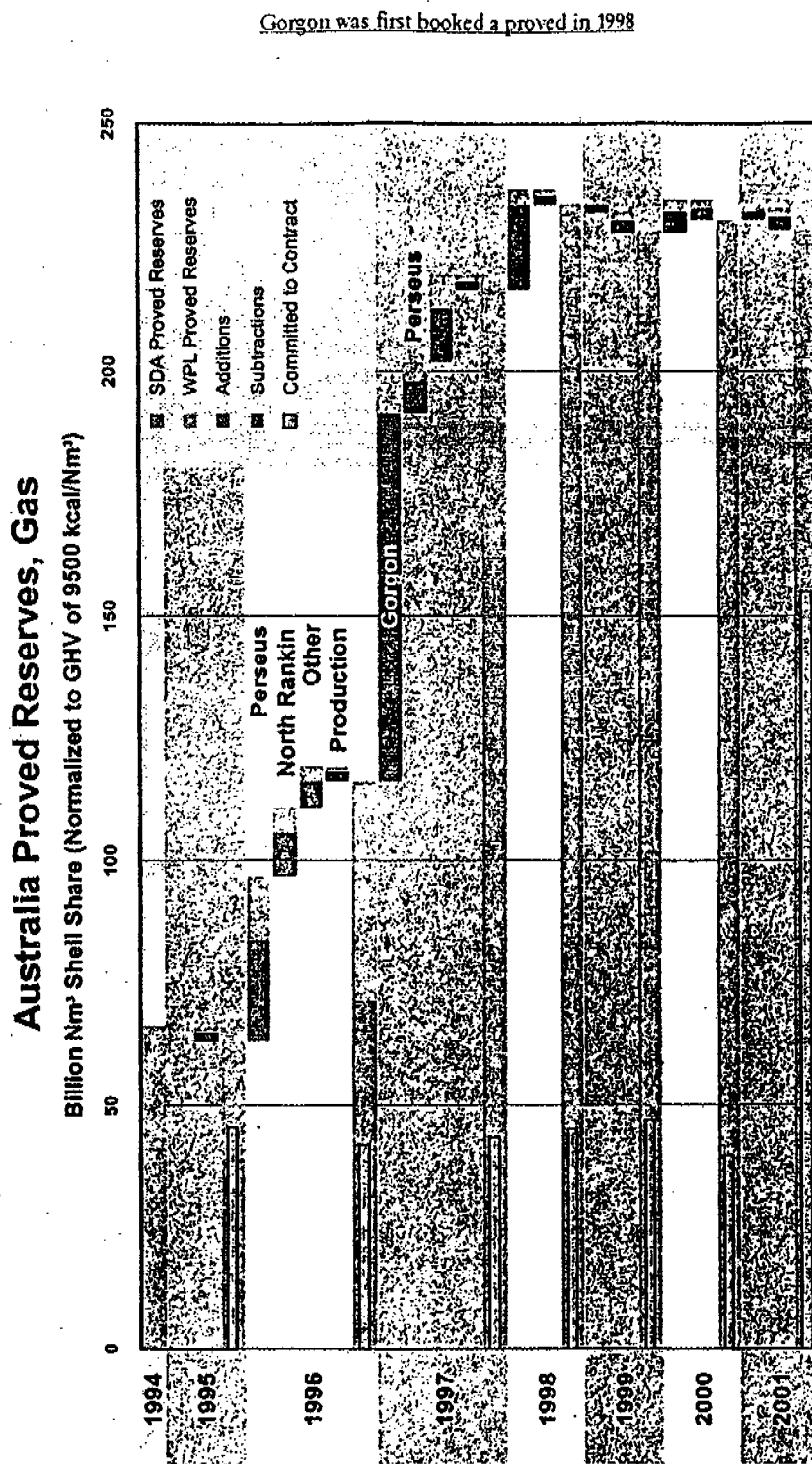
## Notes:

a Existing contract

b Included as "committed" under the definition (EP 2001-1100, section 4.3.9) which states that .... "In countries with a mature gas market all gas reserves, which have a near certainty of market take-up can be classified as committed" on the grounds that (at least) SDA considered that, for the NWS mature market, any contract for which either a LOI was in place, and/or with "near certainty" that the volumes will eventually be contracted, to be "committed" under these definitions be marketed.



## Attachment 2



1020 MMboe Gas and 110 MMboe NGL added 1996 - 1997: 21% of the EP total during that period.  
 All gas reserves except Gorgon are considered committed to contract.

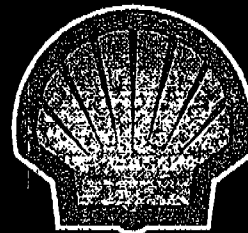
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Gorgon Field Resource Categorisation - Note for Information  
24/02/2004

Gorgon Field  
Resource  
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for  
Information

September 2002

Shell Development  
(Australia) Pty Ltd



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Gorgon Field Resource Categorisation - Note for Information  
24/02/2004

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APPENDIX 1 - Group Definition of Reserves (EP 2002-1100)

APPENDIX 2 - Extracts from SEC Proved Reserves Audit - SDA 9-13<sup>th</sup> Oct 2000

APPENDIX 3 - Summary of Gorgon Economics

APPENDIX 3 - Statutory accounts for WA-25P

APPENDIX 5 - Gorgon OPREP

APPENDIX 6 - Summary of Gorgon Direct/Indirect reserves booked at 1.1.2002

Gorgon Field Resource Categorisation - Note for Information  
24/02/2004

## 1. BACKGROUND

The Gorgon Field lies ~150 kms offshore of Dampier in NW Australia. This major gas field (c. 25 Tcf GIIP) was discovered in 1980 and is operated by ChervonTexaco (57.14% equity) on behalf of a venture including Shell Development Australia (28.57% equity) and ExxonMobil (14.28% equity).

Proved Gorgon "Reserves" were first booked by SDA at 1.1.1998, at which point market conditions had supported work to FEED on a 2-Train, Burrup-based LNG project. A draft LOI had been delivered to Kogas and a high degree of confidence of imminent market capture existed.

In mid-1998, there was a down-turn in the Asian economy and despite receiving a "letter of comfort" from Kogas, the Korean market failed to mature as expected.

Since that time, technical work has continued - the preferred development concept now involving tie-back of an offshore sub-sea infrastructure to an LNG plant and/or Domgas plant on Barrow Island. Significant marketing efforts continued during this period, however, to-date, no LOI's have been secured.

The continued classification of the Gorgon resource volumes as "Reserves" was re-examined during a Group Reserves audit in October 2000, which reported that:

*"Maintaining the preliminarily booked volume of Gorgon gas reserves was supported on the grounds that a gas market was highly likely to be established in due course and that it must be considered likely that an extension of the current 5-year Retention Lease will be granted in 2002. "*

In April 2002, updated Group Reserves Reporting Guidelines were issued. These guidelines include an updated and refined definition of the term "Reserves"; a definition requiring that stringent, technical and commercial maturity conditions be satisfied before resource volumes may be included in this category.

This note for information summarises the history of Gorgon resource bookings and gives an overview of the current level of technical and commercial maturity of the project, in relation to the criteria set out in the group reserves guidelines. It aims to provide a factual basis for discussion as to the classification of the Gorgon resource volumes in the upcoming ARPR 2003 process.

Gorgon Field Resource Categorisation - Note for Information  
24/02/2004

## 2. RESERVES GUIDELINES

Updated Group guidelines for distinguishing resources volumes between Reserves and Scope for Recovery (SFR) have been issued (Reference 1). Relevant extracts are given in Appendix 1 of this note and are summarised below.

The term "Reserves" is used for resource volumes associated with a project that is technically and commercially mature to the extent that funding is reasonably certain to be secured. Volumes can move from Scope for Recovery to reserves when:

- (1) The Shell Shareholder technical\* and commercial\*\* assurance processes have been satisfactorily passed and no significant issues exist that could preclude proceeding with the project.
- (2) Support to fund the project is reasonably certain (e.g. the project survives the business planning processes of Capital Allocation) and the project forms (or is reasonably certain to form) part of the relevant business plan.

\* Technical maturity - VAR3 must have been completed for major projects.

\*\*Commercial maturity - (i) profitability meets Groups criteria, (ii) market availability is assured and (iii) Group funding is reasonably certain.

Assurance of market availability for gas projects means either (i) "the gas must be contracted to sales or (ii) the gas is "considered as reasonably certain of being sold based on expectation of availability of markets, along with transportation/delivery facilities". A previous third qualification has been deleted from the 2002 Guidelines, namely:

...."that, whilst not firmly planned, (the gas volumes) have been ear-marked for future development and hence may reasonably be anticipated to be sold based upon expectation of availability of markets and project financing".

The new guidelines state that for major projects critically dependent on new gas market capture, reserves booking should in-principle be deferred until agreements have been signed, until near project FID. They also clearly state that if proved reserves cannot be assigned to a project, then the related petroleum resource should be retained/downgraded as/to SFR i.e. there can be no Expectation reserves reported without proved reserves.

In addition, Section 3.3.1 of the new guidelines states that externally reported Group share of proved reserves "is limited to future production within the existing licence or contract period, including any agreed extensions as may be covered by documented evidence".

Gorgon Field Resource Categorisation - Note for Information  
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### 3. HISTORY OF GORGON RESERVES BOOKINGS

An historical overview of Gorgon reserves volumes, as reported by SDA in its "Annual Review of Petroleum Resources", is given in Figure 1 and Table 1 below.

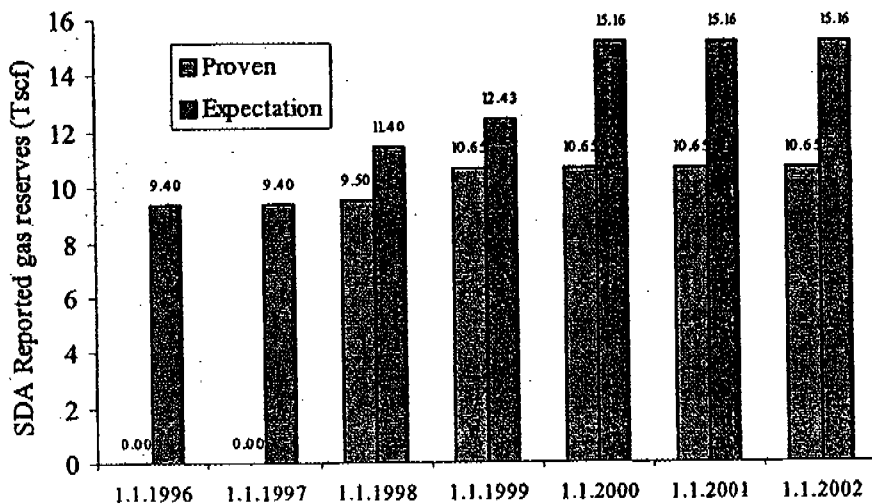


Figure 1 Historical overview of Gorgon reserves volumes, as reported in SDA ARPR

All 100% recoverable hydrocarbon volumes					
SDA Annual Reserves Report Submission					Comment
GAS (Tscf)		CONDENSATE (mmbbl)			
Proven	Expectation	Proven	Expectation		
1.1.1996	0.00	9.40	0	33.7	No proven reserves booked
1.1.1997	0.00	9.40	0	33.7	No proven reserves booked
1.1.1998	9.50	11.40	109	137	Certified by NSAI (IP = 9.63, 2P = 12.52 Tscf)
1.1.1999	10.65	12.43	109	131.3	Increase as result of two appraisal wells Q4 1998
1.1.2000	10.65	15.16	110.7	131.3	Further increase as result of Shell technical review (proved fixed)
1.1.2001	10.65	15.16	110.7	131.3	No change
1.1.2002	10.65	15.16	110.7	131.3	No change

Proved Gorgon reserves were first booked by SDA at 1.1.1998, at which point market conditions had supported work to FEED on a 2-Train, Burrup-based LNG project. A draft LOI had been delivered to Kogas and a high degree of confidence of imminent market capture existed.

Gorgon reserves were independently certified in 1998 by Netherland, Sewell & Associates (NSAI), immediately after the final two appraisal wells were drilled in Q4 1998. The proven volume of 9.63 Tscf was very close to the 1.1.1998 SDA booked volumes of 9.50 Tscf, and some 10% lower than the Shell reported volumes at 1.1.1999 of 10.65 Tscf.

A technical review was carried out by Operator in 1999 (Ref 6), which resulted in a further increase in technical reserves following incorporation of appraisal information from the two 1999 wells. This work was reviewed by SDA (Ref 7) and resulted in an increase of 'technical' volumes from 10.65 Tscf to 12.59 Tscf proven (12.43 to 15.16 Tscf Expectation). However, due to market availability uncertainty at the time SDA deemed it cautious to freeze the 1.1.2000

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ARPR reported proven reserves at the 1.1.1999 level of 10.65 Tscf. This number has been frozen ever since - a decision supported by the 2000 SEC audit as described below. Hence the currently reported proven volumes are some 20% lower than the technically accepted volumes.

A more detailed breakdown of the gas and condensate volumes as booked in SDA's 1.1.2002 ARPR is given in Appendix 6.

Chevron currently carry Gorgon recoverable gas volumes as 12.4 Tscf (P90) and 14.8 Tscf (Expectation) (Ref 5), although it is believed that they do not report SEC proved volumes and carry under a Scope for Recovery Category. These volumes are very close to the 1999 SDA technical review.

### 3.1 SEC Proved Reserves Audit 2000

Continued booking of Gorgon reserves was supported by the Group Reserves audit (October 2000), as summarised below.

*"Maintaining the preliminarily booked volume of Gorgon gas reserves (first done at 1.1.1999) was supported on the grounds that a gas market was highly likely to be established in due course and that it must be considered likely that an extension of the current 5-year Retention Lease will be granted in 2002."*

Further extracts from the reserves audit findings are shown in Appendix 2, and conclude that there was little doubt that a market for Gorgon gas would be found in the long term. Group reserves reporting guidelines at the time allowed this gas, in-principle, to be reported as reserves. One outstanding issue related to whether or not the current retention lease (expiring in 2002) would be renewed. Although there was little doubt that an extension would be granted, there was no automatic right and Group guidelines were not clear on the issue as to whether this would affect a reserves booking. As such it was recommended to maintain the current booked volume of Gorgon proven reserves of 10.65 Tscf (even when the actual volume had been superseded by a 20% larger volume, following new technical work) and not book any increases until either the Retention Lease had been extended or until e.g. a letter of intent with a prospective buyer had been signed.



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#### 4. BENCHTEST OF GORGON VOLUMES AGAINST 2002 GROUP GUIDELINES

##### 4.1 Technical Maturity

The following summarises the status of The Gorgon project technical maturity at 1/9/02:

1. Gorgon technical reserves have been independently certified by NSAI (Dec 1998, Ref 3). A comprehensive review of the operator subsurface work was undertaken by SDA in late 1999 (Ref 7).
2. Significant work has been carried out to improve the 1998 development scenario, with a sub-sea tie-back to Barrow Island LNG facility currently the preferred option. Economics of the current 1-Train LNG-based scenario are robust to + 30% CAPEX (summarised in Appendix 3).
3. A full EP VAR3 and GP VAR2 are currently planned for Q2 2003. In preparation for this VAR a sub-surface technical review is planned for September 2002. Within this timeframe a detailed cost review of the onshore Barrow Island LNG plant is also planned.
4. Operator has submitted the 2002 Retention Lease renewal and results are pending. It is highly likely that renewal will be granted, on the strength of significant technical and commercial work done to-date, although the minimal work obligations proposed by Operator could be challenged. Hence the currently booked Gorgon proved reserves are not strictly limited to future production with existing licence periods (Section 3.3.1, ref 1), although it is considered highly likely that these production licences will be granted in the future.
5. One key issue for the current development scenario is access to Barrow Island. A sustainability review (Economic, Social, Environmental) of a Barrow Island development is currently being carried out by the State Government - an 'in-principle' decision is expected from Cabinet mid-2003, after which a normal Environmental Impact Assessment would be required. Fall-back options include using a GBS-mounted LNG plant (FLNG technology) close to the island or seeking Government support for a pipeline to the mainland.
6. Another key technical issue is related to the sequestration of large volumes of reservoir CO<sub>2</sub> in a local aquifer system. Significant technical work has been carried out, with results indicating that the aquifer can easily accommodate the volumes, with minimal risk of losses to surface. However, underground CO<sub>2</sub> sequestration has not yet been carried out in Australia. Considerable industry-academia research is being progressed on this issue, funded by SDA and ChevronTexaco amongst others.

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#### 4.2 Commercial Maturity

A project is deemed commercially mature, when (1) its profitability meets the Group's criteria (as applied through Shell's corporate Capital Allocation process), (2) market availability is assured (see below) and (3) funding by the Group is 'reasonably certain'. These three criteria are addressed as follows:-

##### Profitability meets Group's Criteria

Appendix 3 summarises the current integrated economics for a 2009 RFSU to a 1-Train LNG plant at Barrow Island (7 year ramp-up). Business Plan Integrated project economics at Mid PSV were NPV7 \$S US\$ 200 million and VIR7 0.32. Project economics are currently robust to +30% CAPEX at current LNG mid-PSV.

At low PSVs the project is exposed, but there is scope to mitigate this (and make project NPV, VIR neutral at Low PSV) by structuring a variable transfer price.

##### Market Availability is Assured

A down-turn in the Asian economy around mid-1998 resulted in the Korean market not maturing as expected, although a "letter of comfort" had been secured from Kogas. Since that time significant marketing efforts to find alternative markets have continued and technical solutions to a 1-train design case as well as Domgas development scenarios have developed - however to date no LOIs have been signed.

Although sales are not yet contracted and tough competition exists within the Asia Pacific region, SDA considers that the gas is "reasonably certain of being sold based on an expectation of the availability of markets" as follows:

1. The current Gas and Power Asia-Pacific supply-demand picture, as shown in Figure 2 below, suggests a reasonable base case expectation for Australia to capture sufficient volumes for three new LNG trains (after NWS Train 4) over the next decade, i.e. two trains into North East Asia and one into US West coast - with two or four in the Low and High cases respectively. The rationale for this level of market capture is described in SDA Gas Master Plan (Ref 2), which has been endorsed by both SDA management and GP Excom.
2. In the expected three-train growth scenario, it is considered probable that the NWS T5 and Sunrise FLNG will secure two of the trains. For the third train it is currently considered that NWS T6 is extremely unlikely to be successful in competition with Gorgon for a number of reasons (outlined in Ref 2). Hence - on condition that the Gorgon venture is successful in pursuit of a green-field development - it is considered reasonably certain that market availability exists.
3. A draft LOI has been developed with Sasol-Chevron to provide an initial volume of 4 TCF for a GtL plant, to be built on an integrated site with the LNG plant on Barrow Island. Fiscal support for GtL is required from the Federal Government - whose position is expected to be made clear within the next months. In the event of a positive decision it is likely that the LOI will be signed in the near future, to be followed with an SPA in approximately one year.

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4. Evidence of the intense commercial work currently being carried out is shown in Chevron's "OPREP" roadmap in Appendix 5.

In summary, Gorgon is a major gas project dependent on new gas market capture. Agreements have not yet been signed and it has not yet reached FID, although it is considered reasonably certain that market availability exists.

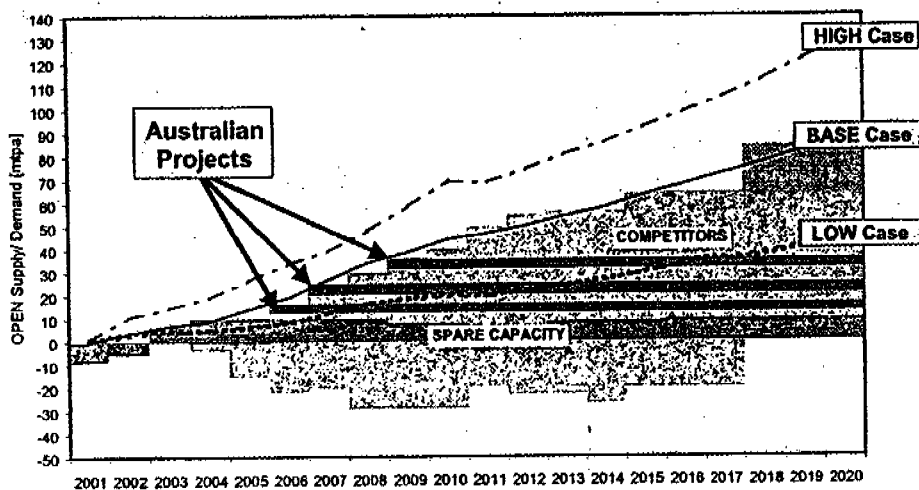


Figure 2 Asia Pacific Supply and Demand outlook (includes USA West Coast) - Ref SDA Gas Master Plan, April 2002.

#### Funding by Group is Reasonably Certain

Although described in the SDA Gas Master Plan as a 'firm' project, the Gorgon project has not yet been tested in the Capital Allocation Base Plan process. It is included in the SDA Business Plan 2003-2007 as an Option.

#### 4.3 Benchtest Summary

From the above discussion, the current categorisation of Gorgon resource volumes as "Reserves" is considered equivocal. A strict interpretation of the guidelines might suggest that reclassification of these volumes, as Scope for Recovery, would not be unreasonable. However, it may also be argued that current and planned near-term activities might lead to confirmation of the booking of the resources as "Reserves".

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## 5. POTENTIAL ISSUES / RISKS

The following paragraphs highlight a number of other issues / considerations that are affected by the choice of resource category to which Gorgon volumes are assigned:

### 5.1 Reserves Replacement Ratio.

Re-categorisation of the Gorgon hydrocarbon volumes as SFR, would lead to reduced SDA and Shell Group reported proven reserves of 10.65 Tscf. The impact of such a move on Reserves Replacement Ratio needs to be quantified and managed.

### 5.2 Market Confidence in Gorgon Development

De-booking Gorgon reserves could potentially have a detrimental effect on the current marketing effort. Potential customers would query why Shell no longer had reserves confidence. However, as previously noted, it is believed that Chevron Texaco do not carry their equity Gorgon volumes as "Reserves".

### 5.3 SDA Financial Accounting

#### PRRT Status

The status of Gorgon volumes (in Reserves or Scope for Recovery category) will have no effect on SDA's PRRT status unless either (i) future exploration activity in the permit were to be effected and/or (ii) Gorgon were to be farmed-out or relinquished. None of these scenarios would be a likely result of de-booking Gorgon volumes to the Scope for Recovery category.

#### Statutory Accounts

The statutory accounts carrying value for the Gorgon WA 25-P permit is A\$155.1 million (cf Appendix 4). These historical costs predominantly relate to exploration and appraisal wells in both the Gorgon and West Tryal fields. Continued carrying of these historical costs is justified as long as the SDA is actively pursuing development and is largely independent on the categorisation of Gorgon volumes as SFR or reserves.

### 5.4 Exploration/Appraisal Carry

The group carrying value for Gorgon is currently A\$32.9 million, comprising:

- Gorgon 3 A\$12.9 million
- Gorgon 6 A\$4.9 million
- Gorgon appraisal A\$9.9 million
- IAGO 1 A\$2.4 million
- Mob/Demob A\$2.8 million

These costs are being carried on the basis that we have plans to develop Gorgon volumes in the future. A de-booking of volumes from reserves to Scope for Recovery would be on the basis that the volumes are not deemed commercially/technically mature at this stage but would not imply that SDA no longer plan to develop the reserves. As

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with the statutory accounts position, there should be no reason to write these costs off against EP NIAT.

#### 5.5 Depreciation

Gorgon volumes are not being carried in the SDA depreciation calculations, hence a de-booking of volumes to Scope for Recovery would have no effect on SDA's depreciation position.

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#### 6. REFERENCES

1. Petroleum Resource Volume Guidelines Resource Classification and Value Realisation (EP 2002-1100)
2. Gas Master Plan - Revision 3 (April 2002) Shell Development (Australia)pty Ltd
3. Reserves Certification study of the Gorgon field located in Permit areas WA-2-R and WA-3-R (Netherlands, Sewell & Associates, INC) December 1998.
4. 1999 Shell technical review (internal note for file)
5. 2001 Reserves Report Greater Gorgon Area (Chevron Texaco 31<sup>st</sup> May 2002)
6. Gorgon Gas Field Resource Assessment, Feb 2000
7. Gorgon Development - Technical Maturity and Issues for future focus, Feb 2000

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## APPENDIX 1

### GROUP DEFINITION OF RESERVES (EP 2002-1100)

#### Resource Volume Classification - Definition

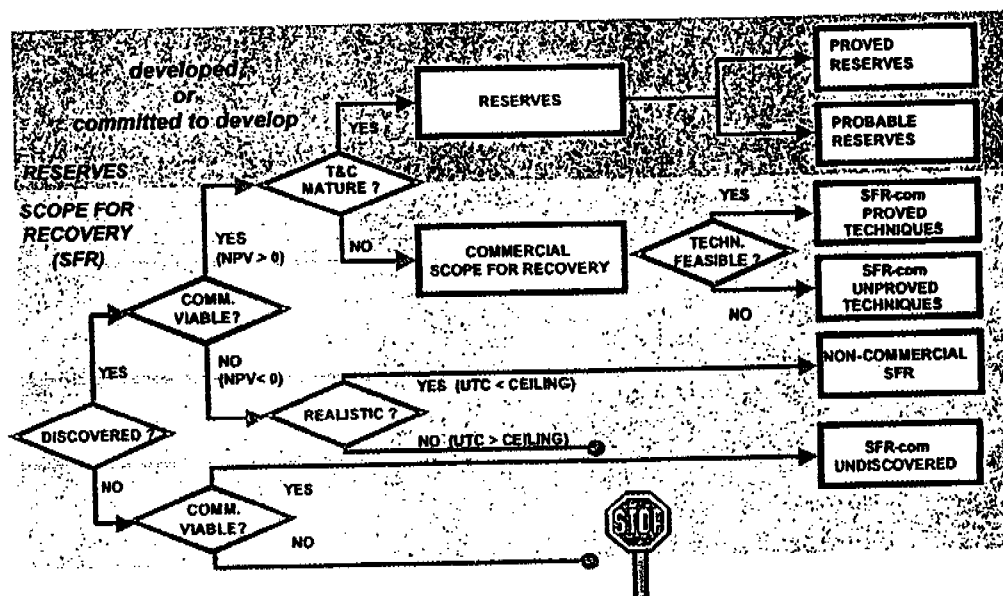
A petroleum resource is any accumulation of hydrocarbons that is known or anticipated to exist in a sub-surface rock formation, located in the company's current exploration and production acreage.

Resource volumes are reported as the quantities of sales product for crude oil, natural gas and natural gas liquids. The corresponding quantities of field recovery should be maintained by the OU (See Appendix 6). The reporting of petroleum resource volumes should further indicate the petroleum type, the reporting units and conditions, and the Group share.

#### Reserves and Scope for Recovery (SFR) (Figure 1)

Resource volumes are tied to the project or activity that develops them and are generally reported by field. The term **reserves** is used for resource volumes associated with a project that is **technically and commercially mature to the extent that funding is 'reasonably certain' to be secured**. Resource volumes that do not meet these criteria are classified as **Scope for Recovery (SFR)**. **Proved reserves** are the portion of reserves that is reasonably certain to be produced and which will be reported externally. If no Proved reserves can be assigned to a project, then the related resource volumes are to be retained as SFR.

The concept of 'reasonable certainty' requires 'hard' field data, contracts and thorough evaluation to underlie the numbers. The implication is that as more data becomes available, upward revision is much more likely than negative revision.





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#### Technical and Commercial Maturity

For a resource volume to pass from scope for recovery (SFR) to reserves (for internal as well as external reporting), the associated project(s) will have to reach both technical and commercial maturity. This is deemed to be the case when:

1. The Shell shareholder assurance processes have been satisfactorily passed both technically and commercially and no significant issues that could preclude proceeding with the project exist.
2. Support to fund the project is reasonably certain (e.g. the project survives the business planning processes of Capital Allocation) and the project forms (or is reasonably certain to form) part of the relevant business plan.

Major reserves volumes that are no longer judged to be commercially mature should only be de booked after thorough (re-)evaluation.

#### Project Basis

Reserves being future hydrocarbon product available for sale are tied to projects (development) and activities (production operations). A project is any planned creation or modification of wells, surface production facilities and/or production policy, aimed at changing a company's sales product forecast. The aggregated production forecast of an OU must therefore be consistent with its reported reserves. This also holds for the 'proved forecast', as defined by the aggregated 'reasonably certain' amount of hydrocarbons forecast to be produced by the appropriate development/production scenario, duly respecting license duration and overall constraints (e.g. quota).

#### Technical Maturity

For a project to be technically mature, there should be a documented definition of a viable project that is anticipated to be implemented with 'reasonable certainty'. Such project definition should be based on resource and development scenario descriptions, with drilling/engineering cost estimates, a production forecast (including sensitivities) and economics.

For project reserves to enter into the Proved category, independent review and challenge is required (as a control) to preserve integrity of the external disclosures. For major projects such review is routinely executed through the Group's Value Assurance Review process. Note that concept selection (VAR3) must at least have been completed. In all cases, there should be 'reasonable certainty' that nothing is standing in the way of a firm development plan (i.e. there are no technical issues that could de-rail the project).

For smaller projects a documented development plan should suffice, which may be notional if a well-established analogue is in place. The

<sup>1</sup> Examples: Gas sales contracts, major infrastructure needs, government approvals, un-tried technology

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quality of such plan should be a sufficient basis on which to judge the likelihood of project funding (see below).

Commercial Maturity

A project is deemed commercially mature, when (1) its profitability meets the Group's criteria (as applied through Shell's corporate Capital Allocation process), (2) market availability is assured (see below) and (3) funding by the Group is 'reasonably certain'.

Assurance of market availability for oil (and/or NGL) means at least the 'reasonably certain' availability of a pipeline to a shipping terminal or other outlet (e.g. a refinery), whilst for gas this means that the product is:

1. contracted to sales; or
2. considered as reasonably certain of being sold based on an expectation of the availability of markets, along with transportation/ delivery facilities.

For major gas projects critically dependent on new gas market capture, reserves booking should in principle be deferred until agreements have been signed, which is generally at or around project sanction (FID).

The condition of marketability for gas reserves also applies to the NGL products of a non-associated gas project: If the gas market is not assured, neither the gas nor the NGL volumes can be reported externally.

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## APPENDIX 2

### Extracts from SEC Proved Reserves Audit - SDA 9-13th Oct 2000

"Some 10 Tcf (or 86 bln m3 Group share) of proved gas reserves have been booked for the giant Gorgon field since 1.1.1999. This was done on the strength of work done by the operator (WAPET, later Chevron) showing that development of this field through an LNG facility (stand-alone or, preferably, shared with the existing Woodside / North West Shelf LNG facility) was commercially robust. An important challenge is finding a buyer in a market that is fully supplied until 2005 and in which there is still significant competition thereafter. In the long term, however, there can be little doubt that a market will be found for this gas in the East- or South Asian rim. Hence, the Group reserves reporting guidelines do in-principle allow this gas to be reported as reserves.

The outstanding issue is whether the stated Gorgon reserves can be shown to be producible within the prevailing production licence. Gorgon is presently held under a Retention Lease, renewable for successive periods of 5 years under the condition that the field can be considered likely to become commercially viable within the next 15 years and that the lessee is actively pursuing the evaluation of commercial viability, including the conclusion of long term sales contracts. The current Retention Lease expires in 2002. Although there is little doubt that, on the strength of the significant technical and commercial work done to date, an extension of the Retention Lease will be granted, there is no formal right to this extension. Hence the Group guidelines are not fully clear on this issue.

The practical way forward (and recommendation from this audit) is to maintain the presently booked volume of Gorgon reserves (even when the actual volume has been superseded by a 20% larger volume, following new technical work) and not book any increases until either the Retention Lease has been extended or until e.g. a letter of intent with a prospective buyer has been signed."

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### APPENDIX 3

#### SUMMARY OF CURRENT ECONOMICS

The following economics for 1T LNG onshore BWI to End of Reserves (including wellhead compression) show that even at +30% capex project remains robust with VIR > 0.2 at mid PSV. Ramp-up assumption of 7 yr is pessimistic.

At low PSVs the project is exposed, but there is scope to mitigate this (and make project NPV, VIR natural at Low PSV) by structuring a variable transfer price.

Note that CA 2003 submission for Stand-alone Gorgon LNG indicated 100% EP NPV (7%, mid PSV) of 200 mln US\$ with a VIR of 0.32.

#### Integrated Economic Results - 1T LNG EoR @ BWI

Project Screening Value	Profitability Indicators	
	NPV US\$MM (100% Equity, RT 1.7.2002)	
	7%	VIR 7 %
Low PSV	(147)	-0.10
Medium PSV	697	0.49
High PSV	1272	0.90

Item	Sensitivity Analysis for Medium PSV		
	NPV US\$MM (100% Equity, RT 1.7.2002)		
		7%	VIR 7 %
Gas transfer Price	0.70	738	0.52
	1.00	615	0.44
Capex +30%	30%	392	0.21

#### Assumptions

Depreciation - 20 yrs u/s, 15 yrs d/s

FX - \$A/US\$0.55

Full PRRT

7 yr Ramp-up

RFSU 2009

Gas transfer Price = US\$0.80/mmBtu

LNG PSV: CIF Tokyo Bay less US\$0.68/mmBtu freight

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#### APPENDIX 4

#### STATUTORY ACCOUNTS FOR WA-25-P

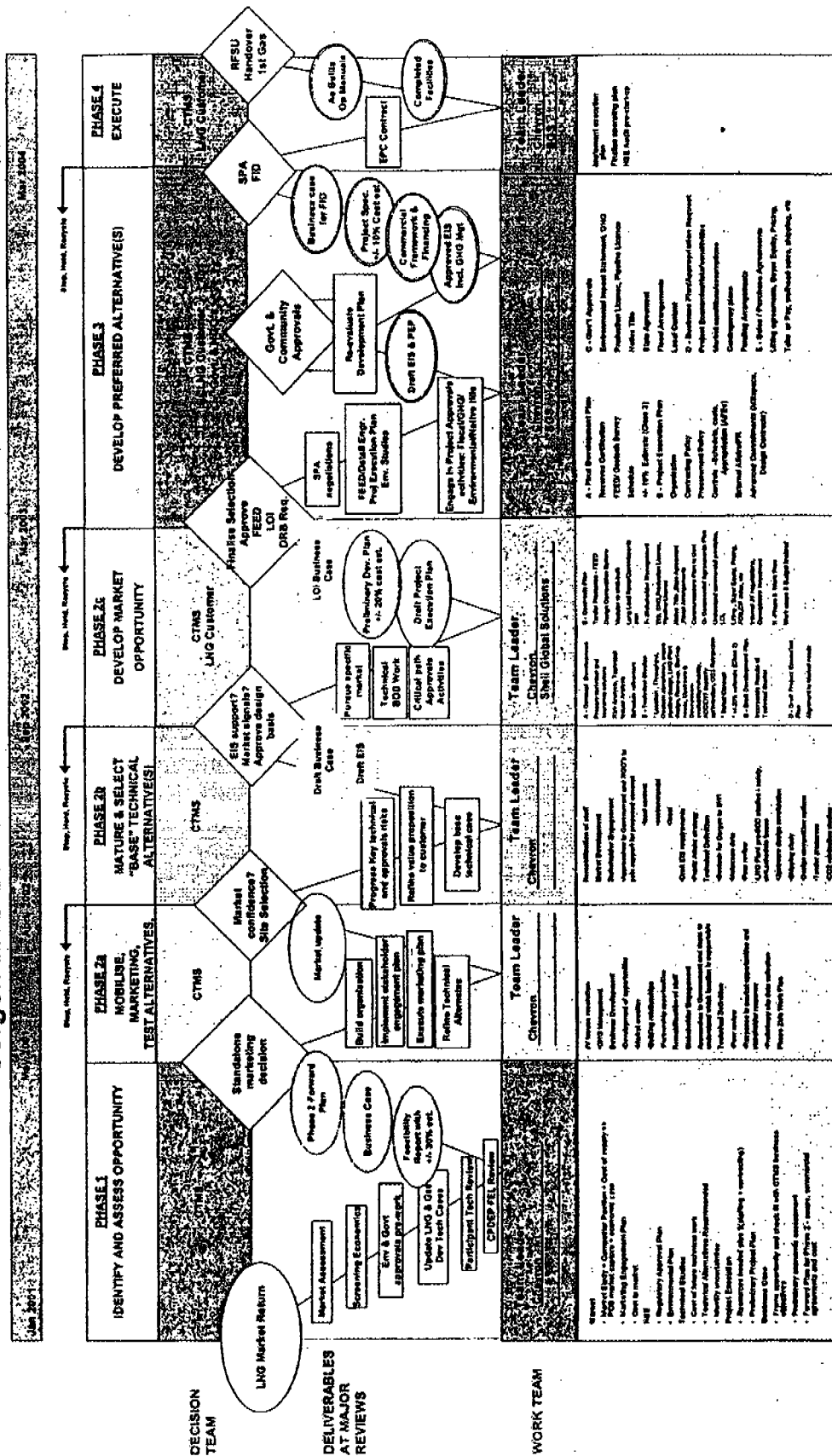
SDA - CAPITALISED INTANGIBLES ENDING DECEMBER 2001			
Permits	Description	well number	
WA25P	spar 1		
	bluebell	ME909	1,417,000.00
AP01/AP06	gorgon 1	ME900	4,704,000.00
	sultan 1		5,850,000.00
	nth tryal 1		1,302,000.00
	nth gorgon 1	ME905	554,000.00
	west tryal 3	MA901	7,599,000.00
	west tryal reentry	AP01ME903	8,306,000.00
	general drilling	AP01MOBLN	2,475,000.00
	west tryal 2		-
	central gorgon	MA910	862,000.00
	venture 1	AP01ME922	15,824,394.00
	permit total		3,624,000.00
	surveys/eol to 31/12/87)	AP01ME923	28,000.00
	WA25/WA205P/WA213p	AP01ME947	1,280,000.00
	XU	AP01ME960	96,548.99
	YANNUT	AP01ME961	723,398.00
	CUE	AP01ME962	244,675.00
	North gorgon	AP01ME948	602,244.00
	OBI One		7,844,374.00
	Secure Old WE		-
	Z56M		287,718.00
	Gorgon 3		550,089.72
	Gorgon 6		13,235,036.41
	Trans Gorgon		4,898,580.80
	surveys wef 1/1/88		42,503.00
	allocate from AP01		10,161,000.00
	Iago 1		2,495,500.00
	Pre drill WA25		2,381,054.90
			16,760.47

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casing	58,553.41
explore, off, lab	57,655,923.87
<b>WA25P permit total</b>	<b>155,119,354.57</b>

**APPENDIX 5**  
**APPENDIX 6 SUMMARY OF DIRECT/INDIRECT GORGON RESERVES BOOKED 1.1.2002**  
**Gorgon LNG Standalone Rev 10 - CPDEP**

**Version: 14/11/01**





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**Gorgon (currently reserves) - PROVED**

WEL Equity  
 SDA = Equity  
 0.00%  
 28.57%

	Gas (TSCF)	Condensate (mln bbls)	Gas mln boe	Total boe
Total	10.65	110.69	1837.3	1948.0
Shell Direct	3.043	31.626	524.9	556.6
Shell Indirect	0.000	0.000	0.0	0.0
Shell Direct+Indirect	3.043	31.626	524.9	556.6

**Gorgon (currently reserves) - EXPECTATION**

WEL Equity  
 SDA = Equity  
 0.00%  
 28.57%

	Gas (TSCF)	Condensate (mln bbls)	Gas mln boe	Total boe
Total	15.16	131.32	2615.4	2746.7
Shell Direct	4.331	37.520	747.2	784.8
Shell Indirect	0.000	0.000	0.0	0.0
Shell Direct+Indirect	4.331	37.520	747.2	784.8

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North West  
Shelf  
Gas Resource  
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Information

September 2002

Shell Development  
(Australia) Pty Ltd



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APPENDIX 1 - History of NWS Gas Reserves Booking

APPENDIX 2 - Extract from EP-2001-1100 - Requirements for commercial maturity for reserves bookings

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## 1. BACKGROUND

This note for information summarises the current methodology used to determine externally reported proved reserves for the North West Shelf group of gas fields. It summarises what was defined as "committed" under the Shell guidelines at ARPR1.1.2002, and qualifies the impact that the recent successful CLNG contract will have on proved reserves bookings.

The entire expectation "economically and technically" producible resource base (excluding Scope for Recovery) for the NWS is currently booked as expectation reserves. Of this expectation volume, historically the entire P85 technical volumes have been externally reported as proved reserves, regardless of the status of signed contractual volumes. This is on the grounds that [quote from 2000 SEC audit]...

" there are likely to be ample opportunities for expansion of the LNG market in South and East Asia, particularly post 2005. Although there is competition on the supply side, there can be little doubt that buyers can eventually be found for all economically producible gas on the NWS".

Although contracts have not been signed which cover the entire NWS resource base, the total economically producible volume is considered to be reasonably certain of being sold and thus commercial (and technical) maturity requirements for reserves bookings as specified in the Group Petroleum Resource Volume Guidelines are deemed to be satisfied. This methodology was sanctioned during the latest SEC reserves audit carried out in October 2000.

There is a legal right under the "Petroleum Submerged Land Act" to extend production licenses beyond 2022, thus reserves have been recorded for the total producing field life.

As a result of the SEC audit in 2000, the proved reserves volumes for the NWS gas fields were further increased by assuming Proved Developed volumes for mature fields to be equal to Expectation Developed volumes. Thus since 1.1.2001 the Proved reserves volumes are greater than the sum of the individual P85 field volumes as provided by Operator. Currently only the North Rankin field is considered to be mature - thus the increase to date has been minimal.

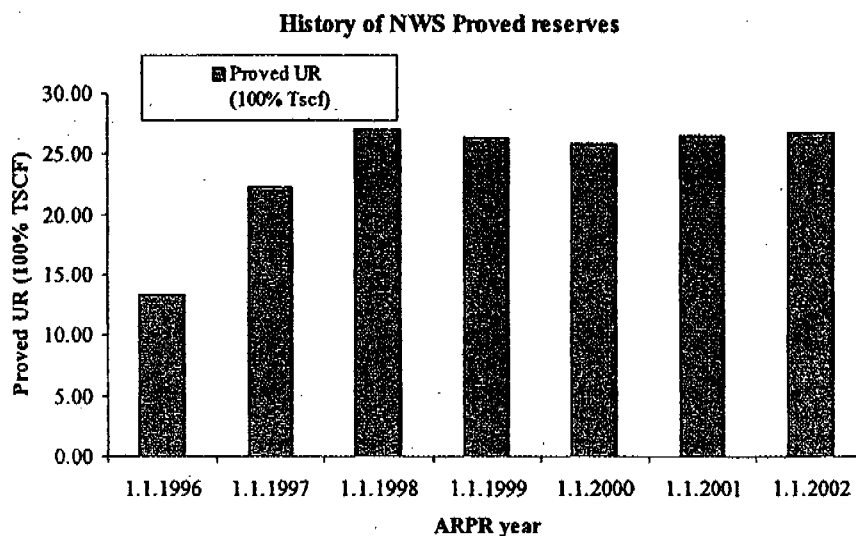
The result of probabilistically adding the field volumes has not been included in the externally reported proved reserves volume. If this were to be done it would add a further 2 TCF to the total proved volumes.

Under the recently awarded CLNG venture, CNOOC will be entitled to a percentage, currently ~5%, of NWS expectation reserves, which will be divested equally from the current six NWS JV partners. Upon finalisation of this contract, and subsequent payments for the equity, SDA will be required to reduce its proved reserves booking by the appropriate percentage. Currently this approximates to a reduction of ~0.2 Tscf Shell direct share proved reserves.

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## 2. HISTORY OF NWS RESERVES BOOKING

An historical overview of the 100% Ultimate Recovery Proved volumes (reserves + cumulative production) as reported in the ARPR since 1.1.1996 is shown in the following figure. Details, change explanations and Shell direct share volumes are shown in Appendix 1.



Historically NWS reserves have been booked by Shell Development Australia on a field-by-field technical and commercial maturity basis, irrespective of the volumes associated with signed gas contracts in place. This was on the grounds that there are likely to be ample opportunities for expansion of the LNG market in South and East Asia, particularly post 2005. Although there is competition on the supply side, there can be little doubt that buyers can eventually be found for all economically producible gas on the NWS. Thus market availability criteria set out in EP 2001-1100, Section 2.3.4, (extracts in Appendix 2) were deemed to be satisfied for all economically producible gas. Under this scenario the successful China deal only serves to accelerate proved reserves production from currently assumed contract extensions.

Major changes of externally booked proved reserve since 1996 have been as follows:-

- At 1.1.1996 only four fields were considered technically mature (Angel, Perseus, North Rankin and Goodwyn). Recovery factors were low and did not include depletion compression.
- Major increase at 1.1.1997:- The Echo yodel field was considered technically mature for the first time. Significant increased recovery for North Rankin and Perseus as a result of compression being included.

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- Major increase at 1.1.1998:- A number of smaller gas fields (Dixon, Keast, Dockrell etc) were transferred from SFR to reserves post technical/economic studies. North Rankin and Perseus recoveries increased as a result of simulation work and production data.
- Minor decrease at 1.1.1999 - as a result of Goodwyn drilling results
- Minor decrease at 1.1.2000 - various technical revisions
- Minor increase at 1.1.2001 - Gaea discovery and increasing North Rankin proved developed reserves to equal expectation developed volumes post SEC recommendation for mature fields.
- Minor increase at 1.1.2002 - as a result of including Athena volumes for the first time (extension of Perseus field into non-equity acreage).

The above changes reflect technical recovery factor changes, discoveries and maturation of field specific volumes from SFR to reserves with the execution of technical/economic studies. They do not reflect changes in the volume of gas committed to signed contracts.

### 3. SEC AUDIT OCTOBER 2000

SDA proved reserves as at 1.1.2000 were audited by the Group Reserves Co-ordinator (Anton Barendrecht) in October 2000. The inclusion of all economically producible NWS volumes into proved reserves (regardless of signed contracts) was endorsed. In fact it was recommended to increase externally reported proved reserves for mature fields by booking expectation, as opposed to P85, volumes. Specific audit review comments pertaining to technical/commercial maturity are as follows:

#### Table 1 extraction from SEC reserves audit check-list

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2.09	Have all proved gas reserves been contracted to sales	Not all of these. There is still uncontracted gas in the NWS fields.
2.10	If not - can they reasonably be expected to be sold in existing markets and through existing facilities?	Existing NWS gas buyers are likely to be quite willing to extend current contracts: Existing facilities' life span is not seen as a constraint
2.11	If neither, can they reasonably be expected to be developed and sold in a future market?	There are likely to be ample opportunities for expansion of the LNG market in South and East Asia, particularly post 2005. Although there is competition on the supply side, there can be little doubt that buyers can eventually be found for all economically producible gas on the NWS.
1.16	Are projects technically mature or is further data gathering necessary?	Those projects pertaining to proved reserves are mature, with the possible exception of Egret, where the low reserves estimate does not appear to pass screening criteria
2.01	Are projects commercially mature (positive NPV for Group ref criteria over a range of possible future scenarios/low case reservoirs?	Yes ; those that are not are classified as SFR
2.02	Are projects economically viable	Yes, with the possible (minor) exception of Egret)

#### 4. EXISTING LICENCE PERIOD

Whilst there is little doubt that buyers can eventually be found for all economically producible gas on the NWS and market availability criteria can be satisfied, externally booked proved reserves should be limited to future production within the existing production license period, unless there is a legal right to extend the production license (EP 2001-1100, Section 4.3.1) . The NWS production licences expire in September 2022. Under the PSLA (Petroleum Submerged Land Act) the NWS venture have a statutory right to extend the production licences until the end of field life. Thus reserves have been recorded for the total producing field life.

#### 5. COMMITTED VOLUMES

The guidelines for committed gas at 1.1.2002 (EP 2001-1100, section 4.3.9, unchanged in the updated 2002 guidelines ) state that ....

*"In countries with a mature gas market all gas reserves, which have a near certainty of market take-up can be classified as committed"...*



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Under these definitions SDA considered gas reserves to be "Committed Reserves" if there is an LOI in place or if there was a "near certainty" that the volumes will be marketed. For the ARPR 1.1.2002 it was concluded that Current Domgas Contracts & LNG Contracts, **NWS trains 1-3 & Domgas extensions to 2029**, and Methanex but not Syntroleum or BHP DRI could be classified as committed volumes as summarised in the

Committed Volumes as at 1/1/2002 (Tscf, 100%)	ARPR 2002
Production as at 1.1.2001	6.40
<i>Remaining contract volumes as at 1.1.2001:-</i>	
Current Domgas Contracts	2.26
Current LNG Contracts	3.47
T1-3 Extensions	8.50
Domgas Extensions	2.17
T4	4.67
Wedge	0.24
BHP DRI	0.00
Syntroleum	0.00
Methanex	1.76
Remaining contract volumes at 1.1.2001	23.07
Production as at 31/12/2001	6.96
Remaining contract volumes at 1.1.2002	22.51

following table:-

Out of the expectation NWS reserves volumes of 24.6 Tscf, 22.51 Tscf was considered "committed" under the guidelines/assumptions above. This resulted in an indirect share "fraction of committed expectation" of 91.7%. Externally reported proved reserves of 20.0 Tscf (100%) were reported at 1.1.2002 i.e. under the interpretation of "committed volumes as discussed above, the committed volume exceeded Proved reserves.

The above reflects a snapshot as agreed at 1.1.2002, clearly the impact of China and other events will have changed the situation. CLNG volumes will now be included as committed - but at the expense of Train 1-3 and Domgas extensions. The latest view of post-China committed contracts is currently under investigation and will be included in the ARPR 1.1.2003. It is possible that extensions to current contracts will no longer be considered as committed.

#### 6. IMPACT OF CLNG DEAL

Under the recently awarded CLNG venture, CNOOC will be entitled to a percentage, currently ~5%, of NWS expectation reserves, which will be divested equally from the current six NWS JV partners. Upon finalisation of this contract, and subsequent payments for the equity, SDA will be required to reduce its proved reserves booking by the appropriate percentage. Currently this approximates to a reduction of ~0.2 Tscf Shell direct share proved reserves.

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## **APPENDIX 2 Extract from EP-2001-1100 - Requirements for commercial maturity for reserves bookings**

### **2.3.3 Commercially Mature**

A commercially mature project is commercially viable over a sufficiently large portion of the range of possible scenarios that reflect the remaining resource uncertainties as well as the remaining commercial uncertainties, including the availability of markets (see below). The definition of what constitutes 'a sufficiently large portion' may vary from case to case but it does require the project NPV for the proved reserves scenario to be positive for appropriate commercial criteria. It is also likely to include an assessment of the capital exposure in case of project failure due to adverse resource realisations. The selected range of scenarios should be documented and auditable.

### **2.3.4 Market availability**

An essential requirement for commercial maturity is also that a market must be available or reasonably expected to be available for the hydrocarbon products. For oil and NGL this means at least the (expected) availability of a pipeline to a shipping terminal or other outlet (e.g. a refinery). For gas this means an expectation that access to a gas market will be available, i.e. the gas must be:

1. contracted to sales; or
2. considered as reasonably certain of being sold based on a reasonable expectation of the availability of markets, along with transportation/ delivery facilities that are in place; or
3. whilst not firmly planned, have been earmarked for future development and hence may reasonably be anticipated to be sold based upon expectation of availability of markets and project financing.

For major gas projects critically depending on new gas market capture, reserves booking should in principle be deferred until agreements have been signed, generally at or around project sanction (FID).

The condition of marketability to gas reserves also applies to the NGL products of a non-associated gas project. If the gas market is not matured (or likely to be matured) and the go-ahead of the project is still uncertain, neither the gas reserves nor the NGL reserves can be booked.

### **2.3.5 Commercially Viable**

A scenario is commercially viable if the NPV is expected to be positive under the applicable (or expected) terms and conditions for the acreage and for the current advised Group reference criteria for commerciality.

### **2.3.6 Economically Viable**

A project is economically viable if the expected NPV under the applicable terms and conditions for the acreage exceeds the separately advised Group project screening criteria or if the project has already been approved by shareholders. Projects generally have to demonstrate economic viability in order to obtain investment approval (See Ref. 13).

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## Appendix 1 History of NWS reserves booking

	Cum production (100% TSCF)	Proved Remaining Reserves (100% Tscf)	Proved UR (100% Tscf)	Increase in 100% UR	Shell direct share	Shell direct reserves (Tscf)	Shell direct UR (Tscf)	Change from previous year
1.1.1996	3.21	10.09	13.30	0.00	14.25%	1.44	1.90	Angel, Perseus, North Rankin and Goodwyn fields only considered technically/commercially mature
1.1.1997	3.78	18.56	22.34	9.04	14.26%	2.65	3.19	Significant improved recovery as a result of compression being included for North Rankin and Perseus. Echo Yodel volumes included as technically mature for first time
1.1.1998	4.38	22.61	26.99	4.65	14.27%	3.23	3.85	A number of smaller NWS gas fields (Dixon, Keast Dockrell, Lambert Deep, rankin/Sculptor, Tidepole and Wilcox) were transferred from commercial SFR to reserves. North Rankin/Perseus recovery factor increasing as a consequence of reservoir modelling work and detailed simulation of production and pressure data.
1.1.1999	4.93	21.43	26.36	-0.63	14.28%	3.06	3.77	Goodwyn drilling results - reduction in proved UR Net effect of technical revisions reduction in 100% volumes.
1.1.2000	5.52	20.34	25.86	-0.50	15.64%	3.18	4.04	Recalculation of Shell direct share resulted in increased shell direct volumes Gaea discovery.
1.1.2001	6.13	20.34	26.47	0.61	15.74%	3.20	4.17	North Rankin proved increased to expectation volumes post 2000 SEC recommendation for mature fields
1.1.2002	6.73	19.96	26.69	0.22	15.79%	3.15	4.21	Athena volumes included and offset 2000 production

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