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IN THE UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY
Civ. No. 04-3749 (JAP)
(Consolidated Cases)
Hon. Joel A. Pisano
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IN RE ROYAL DUTCH/SHELL TRANSPORT
SECURITIES LITIGATION
----------------------------------x

January 10, 2007

10:07 a.m.

Videotaped deposition of BRIAN J. WARD, taken by the Lead Plaintiff and the Class, at the offices of LeBoeuf, Lamb, Greene & MacRae LLP, 1 Minster Court, London, England, before Gail F. Schorr, a Certified Shorthand Reporter, Certified Realtime Reporter and Notary Public within and for the State of New York.

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PHILLIP HILL, Video Operator
Action Legal Video, Inc.

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BRIAN J. WARD

THE VIDEO OPERATOR: This is the beginning of tape 1, volume 1. This is the video operator speaking, Mr. Phillip Hill of Merrill Corp. London. Today is January 10, 2007. We are at the offices of LeBoeuf, Lamb, Greene & MacRae in London, to take the video deposition of Brian Ward. This is In Re Royal Dutch/Shell Transport Securities Litigation. This is being heard in the United States District Court, District of New Jersey, Case Number Civ. 04-3749 (JAP).
Will counsels present please introduce themselves for the record.
MS. MARSHALL: Caroline Marshall, Bernstein Liebhard & Lifshitz, on behalf of Peter M. Wood,

the lead plaintiff and the class.
MR. WELCH: David Welch, Bernstein Liebhard & Lifshitz, also on behalf of plaintiff.
MR. MACFALL: Timothy MacFall, Bernstein Liebhard & Lifshitz,
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on behalf of plaintiffs and the class.
MR. PLATT: Charles Platt, Shell International B.V., on behalf of the Shell corporate defendants.
MR. CLARK: Christopher J Clark, LeBoeuf, Lamb, Greene & MacRae, for the Shell corporate defendants and the witness, Mr. Ward.
MR. FERRARA: Ralph Ferrara, LeBoeuf, Lamb, Greene & MacRae, on behalf of Shell Transport & Trading, Royal Dutch/Shell and our witness today, Brian Ward.
MR. CORSON: Nicholas Corson, Hogan & Hartson, on behalf of KPMG Accountants NV.
MS. LATIMER: Aimee Latimer, Mayer Brown Rowe & Maw, on behalf of defendant Sir Philip Watts.
MR. FOUKAS: Savvas Foukas of Hughes Hubbard & Reed, on behalf of PricewaterhouseCoopers LLP.
MR. SENNETT: Nancy Sennett, of Foley & Lardner LLP, on behalf of
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the defendant Judith Boynton.
THE VIDEO OPERATOR: Will the court reporter, Ms. Gail Schorr of Merrill Corp. New York, please swear in the witness.
B R I A N J. W A R D,
residing at PonSford Farm, Knowle, Cullompton, Devon, EX15 1PX, UK, having been first duly sworn by the Notary

Public (Gail F. Schorr), was examined and testified as follows:

EXAMINATION BY MS. MARSHALL:

Q. Good morning.
A. Good morning.

MS. MARSHALL: Mr. Ward, before we begin, I just want to note for the record that this is a voluntary deposition being conducted in London, in the United Kingdom by the consent of all parties. It's being conducted pursuant to the Federal Rules of Civil Procedure 29. Pursuant to that agreement, the deposition is to be conducted in accordance to the Federal

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Rules of Civil Procedure and all applicable rules and orders of the US District Court for the District of New Jersey.

Q. Mr. Ward, have you ever been deposed before?
A. No.
Q. Okay. Why don't we go over some groundrules. I'm sure that your counsel has gone over this with you, but we'll just -- I'll just do it again for the record so it's clear.

It's important that you wait till I finish my question before you give your answer even if the answer is obvious before I finish my question, so that the court reporter can take down my question as well as your answer. Okay?

It's also important that when I ask you a question that's a yes or no question that you -- if you want to nod your head of course that's fine, but you have to answer verbally so she

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can take down your answer as well. Okay?
A. Yes.
Q. That's a good example. If at any point you need to take a break just let me know and we'll be able to take a break provided there's not a question on the record.
If I ask you a question at any point that you don't understand please let me know and I will rephrase it for you. Otherwise, I'll assume that you understand the question. Okay?
A. Okay.
Q. For the purpose of this deposition, when I say Shell, I'm implying Royal Dutch/Shell Transport and operating companies and service companies in which they hold an interest. So if there's any further definition that you'd like to use or a different definition depending on whatever question or answer or time
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BRIAN J. WARD
period we're talking about just let me know if you want me to further clarify or if you need to further clarify that.
A. Okay.
Q. Is that okay?
A. Yes.
Q. We're just going to begin with some preliminary questions about your background. Okay?
A. Yes.
Q. Can you state your address for the record?
A. Ponsford Farm, Knowle, Cullompton, Devon, England.
Q. Where did you receive your formal education?
A. At --

Q. At a university level.
A. University level?
Q. Yes.
A. In the University of East Anglia, in Norwich.
Q. What type of degree did you receive?
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BRIAN J. WARD
A. I got an honors degree in physics.
Q. What year did you receive that degree?
A. 1968.
Q. Did you have any particular focus when you received that degree?
A. No.
Q. Did you receive any subsequent degrees?
A. No.
Q. Do you have any professional licenses? Or have you ever had any professional licenses?
A. No.
Q. Have you ever belonged to any professional organizations?
A. No.
Q. Did you ever have any formal training outside of employment after 1968?
A. No.
Q. When did you begin your employment with Shell?
0011
BRIAN J. WARD
A. August 1968.
Q. And what was your first job with Shell?
A. I went as a junior petroleum engineer to The Hague where I went through a seven-month training period.
Q. What did that seven month training period entail?

A. Basically going through all the basic disciplines in the oil company E&P business.
Q. How many disciplines were those?
A. Approximately six or seven.
Q. Do you recall what any of them were?
A. I do, yes.
Q. Can you list them?
A. Drilling, reservoir engineering, production geology, operations, economics. I don't recall any more.
Q. After you finished that training, what were your duties and
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BRIAN J. WARD
responsibilities as a junior petroleum engineer?
A. I was sent to Brunei in Borneo, where I did my first stint as an operations engineer.
Q. How long did that stint last?
A. In Borneo in total about three or four years because I was posted to Sarawak halfway through and then came back to Borneo -- to Brunei, I beg your pardon.
Q. And what were your responsibilities during that time period?
A. I was an operations engineer and a petrophysicist. That was one of the other courses, by the way, to your previous question.
Q. Okay.
A. And back to petrophysicist. So I did two jobs as a petrophysicist and one job as an operations engineer.
Q. What's a petrophysicist?
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BRIAN J. WARD
A. A petrophysicist is basically a person who interprets the wireline logs that are run down hole to measure the properties of the rock and the fluids in the rock, in other words, to say whether there's gas or oil down there.
Q. Where did you move from there?
A. I went from Brunei to Rijswijk in Holland where I did some one year, approximately one year of research work into petrophysics.
Q. Would that have been 1971?
A. That would have been about 1974.
Q. So you were in Brunei from '69 or so?
A. Yes.
Q. Until '74?
A. Yes. Brunei and Sarawak, yes.
Q. Was there any particular focus of your research that year in
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BRIAN J. WARD
Rijswijk?
A. There was. It was really to do with the errors made by the logging tools I was researching into.
Q. What do you mean by the errors made by the logging tools?
A. When you measure something in real life there's always errors associated with that measurement, and my job was to look at some of these tools and see if I could quantify what the errors were.
Q. What did you do after that year?
A. I went to Nigeria.
Q. What was your title in

Nigeria when you first arrived?
A. When I first arrived I was
senior petrophysicist and I also
combined that with senior economics
job.
Q. And what were your
responsibilities as a senior
petrophysicist?
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BRIAN J. WARD
A. My job was to ensure that
the petrophysical data and evaluation
thereof was done in a professional
manner.
Q. And what were your
responsibilities with respect to your
economics responsibilities?
A. I would run the project
economics for the company, Shell
Petroleum Development Company.
Q. And what did that entail?
A. It entailed gathering
together all the information required
to run the economics of a project to
see whether or not it was profitable.
Q. And how long did you stay in
those roles?
A. Three years.
Q. And do you recall who you
reported to during that time?
A. Chief petroleum engineer was
Peter Everett.
Q. What position did you move
to after that?
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BRIAN J. WARD
A. From Nigeria I went back to
Brunei.
Q. About what year is that?
A. '77, '78.
Q. What was your role this time
in Brunei?
A. I was head of technical

agreements and economics.
Q. What did that entail?
A. Basically my job was to run a department that looked after the economic evaluation of the projects within the company, and also to be custodian of and advise on technical agreements with other parties, third parties.
Q. How long did you hold that position?
A. Two, three years.
Q. Where did you go after that?
A. I went to Argentina.
Q. How long were you in Argentina?
A. Ten months.
0017
BRIAN J. WARD
Q. About what year was that, if you remember?
A. That was 1982.
Q. What was your role in Argentina?
A. I was operations manager and petroleum engineering, head of petroleum engineering.
Q. Did you have a particular focus during those 10 months?
A. Yes, we were drilling exploration wells, exploration and appraisal wells offshore in southern Argentina.
Q. Where did you go from there?
A. I went to NAM in Holland.
Q. What year -- so that would --
A. '82.
Q. '82?
A. Yes.
Q. And how long did you stay there?
A. A couple of years I guess.

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BRIAN J. WARD
Q. Do you recall what your role was there?
A. Yes. I was head of operations.
Q. Did you have any particular focus during that time period?
A. No. It was a general job running the operations in the company.
Q. Where did you move from there?
A. I then went to Sarawak in Borneo.
Q. How long were you in Sarawak?
A. A couple of years I guess.
Q. It's the pattern I guess. And what was your role there?
A. Two or three years. Three years probably. I was operations manager.
Q. Did you have any particular focus during that time period?
A. No.
Q. Where did you move to after
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BRIAN J. WARD
that?
A. I went to The Hague in head office.
Q. What year did you arrive in The Hague, if you remember?
A. I've forgotten where we're up to.
Q. You had just left --
A. No I mean in years.
Q. Sarawak, you said you were there two or three years which I think probably gets us to about '85. Does that sound right?
A. Yeah.
Q. It might have been a little

later? How long were you in Holland?
A. Well, you know, all these postings were two to three years.
Q. Okay. What was your title when you were in The Hague?
A. I was head of group drilling operations and I ran their single string ventures.
Q. Now when you say group

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BRIAN J. WARD

drilling operations, what does that encompass?
A. It means that my job was to oversee -- we spent several million dollars a year on drilling and my job was to oversee the management of our drilling operations around the world.
Q. So there was no particular geographic focus, it was global?
A. No, it was global.
Q. And what is a single string venture?
A. Single string venture is where you send a drilling rig somewhere where your exploration people have said we should drill a wildcat well, it could be in Nepal, or Far East or deepwater.
Q. And when you use the term wildcat well, can you explain what that means?
A. It means you haven't drilled in that region before.
Q. How long did you have that

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BRIAN J. WARD

role as head of group drilling operations in the single string?
A. Two years.
Q. Do you recall who you reported to during that time period?
A. No, I can't recall his name.

Q. Okay. Do you recall where you moved from there?
A. Yes. I went to Aberdeen.
Q. Do you know about where we are now in terms of years?
A. Yeah, we're early nineties now.
Q. What was your role in Aberdeen?
A. I was the production director and deputy managing director for Shell UK exploration and production.
Q. What were your responsibilities as production director?
A. To oversee the -- the field office, if you like, in Aberdeen. We
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BRIAN J. WARD
had two offices. One was in London and one was in Aberdeen. Aberdeen ran everything to do with the operation, and that was my job, to look after the operations in the North Sea.
Q. Did you have any different duties as deputy managing director or were those the same role?
A. No, it wasn't. The deputy managing director just entailed if the managing director is away I would take over from him.
Q. Okay. Where did you move from there?
A. From there in 1994 I went to Oman in the Middle East.
Q. How long were you in Oman?
A. Till 1999.
Q. What was your title there?
A. Managing director.
Q. What were your responsibilities as managing director in Oman?

A. To oversee the running of
0023
BRIAN J. WARD
the company and to manage the relationships with government ministers.
Q. Do you recall who you reported to during that time period?
A. I reported to, well, various people I guess. Phil Watts was one of the people in the center whom I would report to.
Q. And what was his role at the time?
A. He was head of exploration and production.
Q. So you reported directly to him when you were the MD of Oman?
A. Correct.
Q. Was he the head of EP the entire time that you were the managing director of Oman, if you recall?
A. No, he wasn't, but the last three years I guess.
Q. The last three years?
A. Yes.
Q. So when you first got there
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BRIAN J. WARD
there was somebody else in that position?
A. There was somebody else. Mark Moody-Stuart was the...
Q. Where did you go from Oman?
A. From Oman I went to the NAM in Holland.
Q. What year did you arrive there?
A. '99.
Q. Do you recall what time of year it was that you made the switch?
A. It was the autumn of 1999.
Q. What was your role in NAM?

A. I was the managing director.
Q. Was there any particular reason for the switch from Oman to NAM at that time?
A. I'd done nearly five years in Oman, and it was time to rotate I guess.
Q. Did you have any particular responsibilities in NAM that differed in any way from your responsibilities
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BRIAN J. WARD
in Oman?
A. Not really, but it was a very different company and therefore focus was very different.
Q. What was the focus in NAM?
A. I think the focus for myself was to try to downsize the company to something which related to the operation size. It had got too -- too big at that time.
Q. And who did you report to during that time period when you were at --
A. Phil Watts.
Q. Again, even though my question was really so obvious, you've got to wait until I finish.
A. Sorry.
Q. So that the record is clear later on.
So when you were the managing director of NAM you reported directly to Phil Watts?
A. Correct.
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BRIAN J. WARD
Q. And do you recall what his -- was that when he was still head of EP?
A. Yes.
Q. And how long were you at

NAM?
A. Two years, one and a half, two years.
Q. And where did you go from there?
A. I went back to The Hague.
Q. What was your title when you went back to The Hague?
A. Initially it was regional business director.
Q. For which particular area?
A. For South America and for Europe.
Q. How long did you have that position?
A. The position was already in transition when I got there, so it's probably about 10 months. We were reorganizing at that time.
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BRIAN J. WARD
Q. And can you describe how the reorganization affected your position?
A. It affected my position in the sense that in the first case we went from an advisory role as regional business directors, to CEOs, chief executive officers for the region. And secondly, I moved regions over to Africa.
Q. So after the reorganization what was your title?
A. CEO Africa, exploration and production.
Q. Is that also known as EPG?
A. EPG was my department.
Q. What do you mean by your department?
A. The people who worked for me myself were collectively referred to as EPG.
Q. What was your department referred to when you were the regional

business director for South America and
Europe?
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BRIAN J. WARD
A. It didn't have a collective
name.
Q. Do you recall when exactly
you became the CEO for Africa
exploration and production?
A. Not exactly. It was
probably early 2001.
Q. And then did you assume
Heinz Rothermund's position?
A. Correct, when I initially
went there.
Q. Meaning when you initially
became the regional business director
for South America and Europe?
A. Yes.
Q. When you took over for
Africa, who had held the responsibility
of that geographic area?
A. We -- to the best of my
knowledge, in that reorganization
Africa was a separate entity that was
looked after, I'm not -- I'm not
entirely clear how that came about. I
was in NAM when they were going through
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BRIAN J. WARD
this reorganization.
Q. So when you took over for
Rothermund do you recall whether or not
he had been -- when you took over for
Rothermund, do you recall whether he
had been in charge of Africa as well?
A. He did have responsibilities
for Africa, that's correct. But the
main thrust at that time was in Europe
and South America.
Q. And why was that?
A. We had -- prior to the
reorganization, the operating companies

were much more self-sustained and independent in terms of management and that's when we were regional business directors. SPDC specifically had its full complement of management and staff, technical, commercial. So it was a -- it was an entity which didn't need a lot of support or was deemed not to need a lot of support. The idea was to move to a much more direct line responsibility and authority with the
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BRIAN J. WARD
CEO being in the center and the, what used to be the managing directors in the various operating companies became production directors.
Q. Do you know why the change was made?
A. The change came out as a result of a study undertaken in The Hague which I wasn't party to. It was done -- I think it was done to try to accommodate the much more complex nature of doing business around the world as it was becoming. If I went back 20 years then the managing director's job would be perhaps 70 percent technical and 30 percent other. Today the managing director's job is probably 90 percent other, 10 percent technical.
Q. And when you say other, can you explain what some of those other things are?
A. Politics, negotiations on -- with governments about the joint
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BRIAN J. WARD
venture agreements that you've got and so on, handling those was a real-time job which took up an awful lot of time.
Q. So was that a move made so

that more technical work was done centrally?
A. That came later. That was a followup phase where we tried to organization centers of excellence centrally, in The Hague mainly, at that time, and the idea being that we would do the daily work in the operating companies and the high level technical expertise would be gained from The Hague.
Q. And when was that transition started?
A. During the time that I was in the EPG or CEO role.
Q. And did that have any particular genesis that you recall?
A. It was trying to keep up to date with the times and the challenges of running a global company.
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BRIAN J. WARD
Q. Were you involved directly in working on the formation of these centers of excellence?
A. Yes, I was.
Q. And what was your involvement?
A. I set up an outfit called technical operations and excellence, TOE.
Q. When did you set that up?
A. 2002 I guess.
Q. Did you set it up at anyone's direction? Did that come out of ExCom or did it --
A. No, it -- it came out of discussions with Walter van de Vijver. I felt very strongly that we needed to have a center of excellence that would set basic standards for our operations around the world.
Q. And what was Mr. van de

Vijver's view?
A. He thought it was a good
idea.
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BRIAN J. WARD
Q. When did you begin having
conversations with him about that?
A. I can't remember specific
date. I mean it would be around 2002.
And 2001, beginning 2002.
Q. Prior to that time period
had you had any interactions with Mr.
van de Vijver?
A. On a regular basis, yes.
Q. And when did you start
interacting with him regularly? What
position were you in?
A. Mr. van de Vijver actually
phoned me from NAM and asked me to come
down and join him in The Hague. I
might add that my first connection with
Mr. van de Vijver he worked for me in
Aberdeen.
Q. So that was in the early
nineties?
A. Yes, '90 to '94, '91 to '94.
Yeah, '90 to '94.
Q. What was his function when
he was working for you in Aberdeen?
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BRIAN J. WARD
A. He was head of the Brent
Field unit.
Q. And what did that unit do?
A. Its job was to manage the
production and development and
exploration around the Brent Field in
-- in the North Sea.
Q. And how would you describe
your working relationship during that
time?
A. It was very good.
Q. And he eventually moved on

to The Hague?
A. Yes.
Q. So in -- when you say that
he called you to go to The Hague, that
was in 2001?
A. Mm-hmm.
Q. What was his title at that
time?
A. He took over from Mr. Watts
as head of E&P. And I think prior to
that he was in the States. So he'd
come from Aberdeen to the United
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BRIAN J. WARD
States.
Q. Had you had any interaction
with him during the time period that he
was in the United States?
A. Not at all.
Q. So when he became head of
E&P, he called you to ask you if you
would come to The Hague to be the
regional business director for South
America and Europe; is that correct?
A. Not exactly. He had in mind
another organization which we -- we
didn't achieve at the time.
Q. What organization was that?
A. I think he -- his thoughts
were to have a chief operating officer.
Q. Working directly under him?
A. Yes.
Q. And he wanted you to be that
person?
A. Correct.
Q. And when you say that was
something that he didn't achieve, what
do you mean?
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BRIAN J. WARD
A. Well, I mean they had
discussions in the CMD which I'm not
privy to.

Q. And so that position was
never created?
A. That position was never
created.
Q. So when you came to The
Hague what position did you think you
were coming for?
A. I knew I was coming to the
RBD position, but I expected it to be
for a short time.
Q. Did you learn anything about
the discussions that went on regarding
a role that never was created?
A. No.
Q. When did the -- when you
went to The Hague initially, was this
technical operations and excellence
center part of the discussion?
A. No, it wasn't.
Q. That's something that came
up later?
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BRIAN J. WARD
A. Yes.
Q. Okay. How long did you work
-- how long were you involved in
setting up the center for technical
operations and excellence?
A. Well we -- I guess it took
about six months before we finally
staffed it.
Q. And how large of a staff did
it have?
A. Eight or nine people.
Q. And who headed it up?
A. Well, I was head of it I
guess to start with and then I clearly
couldn't handle all the daily work from
the -- from the T&OE group and I had a
deputy run it.
Q. And who was that?
A. John Bell.
Q. And where was the center for

technical operations and excellence?
A. In The Hague, in Rijswijk.
Q. In Rijswijk. Were you
involved in any way in the creation of
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BRIAN J. WARD
SDS?
A. No.
Q. Did you have any involvement
with SDS at any time?
A. Yes.
Q. When did you first have
involvement with SDS?
A. SDS, the evolution of SDS
was a subject discussed quite often in
the EP, ExCom. So I was involved in
that sense. I was involved in the
general discussions around setting up a
center of excellence for deepwater.
Q. And was the center of
excellence for deepwater, did it have
any relationship with the center of
technical operations and excellence?
A. Inevitably there were
overlaps.
Q. What were those overlaps?
A. If you -- in the T&OE group
we had a person responsible for our
engineering work, and SDS also had
people, tended to be more specialized
0039
BRIAN J. WARD
people for running engineering
projects.
Q. And did those people ever
have any need to interact or occasion
to interact?
A. They talked to each other,
yes.
Q. And do you know any
circumstances that would require them
to talk to each other?
A. It would usually be around

staffing.
Q. Were some of the engineers that worked at the T&OE group ever sent to SDS or vice versa?
A. The T&OE group was not an executive group per se. The engineers were still out in the operating companies. So the question would be a discussion around a particular individual if he was going to go to SDS for a few years or whether he would stay in an operating company or come back to The Hague, that sort of
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BRIAN J. WARD
discussion.
Q. Was there any exchange of technical information between the TOE group and SDS?
A. There tended to be -- T&OE tended to specialize much more on our normal standard engineering work. SDS was specialized in deepwater. So there wasn't a huge amount of technical overlap.
Q. So if there was ever a deepwater question that would be directed to SDS?
A. Not to start with. SDS started off as the American organization, or Shell arm looking after the Gulf of Mexico. That's where it all started. And it took, I guess it's still going on now, I don't know, because I left two years ago, but it took a long time for that to evolve into a center of excellence which other operating companies would call on if required.
0041
BRIAN J. WARD
Q. But that did eventually happen?

A. It happened where it could happen. There's a lot of difficulties in a global company in running things globally because the national governments, quite understandably, don't like to have their engineers supplanted by people working somewhere far in the distance, certainly not in their country. So in a place like the UK, then SDS could be much more involved than in a place like Nigeria, for example.
Q. SDS did get involved in Nigeria, did they not?
A. They got -- they got involved in what we call the front end work, the exploration type work, geology, seismic interpretation, that sort of stuff, and they did what we call basin studies for us for the whole of the Niger Delta offshore, because we knew that Niger Delta offshore was
0042
BRIAN J. WARD
going to be a big thing.
Q. Prior to your involvement with the TOE, had you had any involvement with any centers in the United States dealing with technical expertise such as the Bellaire Technology Center?
A. None at all.
Q. When you say that the TOE began with discussions with Walter van de Vijver, did you initiate those conversations or did he?
A. I did.
Q. And why did you do that?
A. Because I felt the need for it.
Q. Was he receptive?
A. Yes, he was.
Q. And what transpired after

the discussions? Were there formal presentations made?
A. Yes, I mean basically I went away and worked with other people to see what form this organization could
0043
BRIAN J. WARD
take. I guess we would have presented it in the ExCom, got the green light and then we staffed it, and that's -- that's how it got started.
Q. Once you came to The Hague in 2001, did you have any direct interaction with Mr. Watts?
A. My direct interaction would not be on a daily basis at all. In other words, I didn't deal with him in terms of my job. But of course I saw him quite often.
Q. Now just to finish out your career, I think we've got you as the CEO of Africa and now it's 2002?
A. Yes.
Q. How long did you remain in that position?
A. Until October 2004.
Q. And what happened at that point?
A. I beg your pardon?
Q. And what happened at that point, did you retire?
0044
BRIAN J. WARD
A. I retired.
Q. Was that a voluntary retirement?
A. Yes, it was.
Q. Just in the normal course of --
A. Well, I'd done a year extra. So it was --
Q. You were beyond and above the call of duty?

A. Yes.
Q. Do you -- have you had any interaction with Shell officially since you retired? Have you been on any advisory boards or anything?
A. No, I've done some consultancy work for some oil companies and in that role I've contacted Shell on several occasions.
Q. Are any of the oil companies that you've consulted with companies that Shell is involved with?
A. No.
Q. Which companies have you
0045
BRIAN J. WARD
done consulting work with?
A. Well --
MR. CLARK: Is it confidential?
A. Yes, I mean --
MR. CLARK: Does it matter?
MS. MARSHALL: No, that's fine.
Q. Since I've gone through your employment history, if you need to take a quick break before we get to the next subject, I'm happy for you to do that, it's up to you.
MR. CLARK: Let's take five minutes.
THE VIDEO OPERATOR: Off the record. The time is 10:50.
(A recess was taken.)
THE VIDEO OPERATOR: Back on the record, the time is 11:06.
Q. Okay, Mr. Ward, if we turn back, not all the way back to the beginning of your time at Shell, but back to when you were in Oman, do you
0046
BRIAN J. WARD
recall during your time in Oman whether

or not you had any responsibilities
with respect to the reporting of
reserves?
A. I was the managing director
for the company and therefore had
responsibility for what went on in the
company, but I wasn't directly involved
in the management or reporting of
reserves myself.
Q. And who was during that time
at the company?
A. A senior reservoir engineer.
Q. And do you recall what his
name was?
A. No, I don't.
Q. Could it have been Stewart
Clayton?
A. No.
Q. What was Stewart Clayton's
role?
A. I don't recall Stewart
Clayton.
Q. Is PDO the name of the
0047
BRIAN J. WARD
operating company in Oman?
A. Correct.
Q. When you were the managing
director of PDO, do you recall any
specific issues with respect to
reserves during your time there?
A. The specific issues I recall
are to do with production rather than
reserves.
Q. And what were the issues
with respect to production that you
recall?
A. We had managed to improve
our production rates year on year for
many years. It was quite clear that we
would be unable to continue
indefinitely doing that, and that was
-- it was a lot of focus of my

attention on that particular issue.
Q. Do you recall at any point in time there being issues with production, problems with production?
A. The forward look for production was an issue.
0048
BRIAN J. WARD
Q. Why was that?
A. Because the year-on-year increases couldn't continue.
Q. And why was that, just because there wasn't enough oil in the ground?
A. Because there wasn't enough resource developed.
Q. Were there -- what was the situation with respect to Shell's license in Oman?
A. We had a license until 2012.
Q. When you were in Oman, was there any talk of extending that license?
A. Yes.
Q. Can you describe what was going on when you were there with respect to the license?
A. We were developing an LNG plant whose period was a 20 year period and we would hope to expand that. And that went beyond the 2012 license expiry date, and therefore, we wanted
0049
BRIAN J. WARD
to enter into negotiations with the government about the extension of the 2012 license period.
Q. Were you involved in those negotiations?
A. No, I wasn't.
Q. Do you know who was involved in those negotiations?
A. No, I don't.

Q. Did they begin while you were in Oman, or did they start later?
A. Not formally, no.
Q. So when you were there it was something that was being discussed internally?
A. Yes.
Q. While you were at PDO, was there any conversation with respect to reserve reporting and the license issue?
MR. CLARK: Objection; vagueness.
Q. You can answer the question if you understand it.
0050
BRIAN J. WARD
A. Could you repeat the question.
Q. Sure. While you were at PDO were there any -- was there any conversation with respect to reserve reporting and the license issue?
MR. CLARK: Same objection.
Q. You can answer the question if you understand it.
A. Okay. There was an issue around reserve reporting while I was in Oman, and I was involved marginally in that discussion.
Q. What was the issue?
A. The issue was that Shell felt they were being conservative with their reserve reporting and we were looking at ways to enhance our reserve reporting.
Q. When you say Shell felt they were being conservative, is the they Shell or is the they Oman, just so it's clear?
A. The they in this case is
0051
BRIAN J. WARD

Shell.
Q. Okay. So Shell felt that Shell was being conservative in its reporting, reserve reporting?
A. What had happened was that in various fields, joint venture fields our partners were reporting more reserves than we were.
Q. And who were your partners on those fields?
A. In the North Sea, Exxon, for example.
Q. And how were you aware of what they were reporting?
A. I can't answer that question.
Q. Did you recall ever having conversations with Exxon about the way that they were reporting?
A. I didn't personally, no.
Q. Do you know if anybody within Shell or PDO was having such conversations?
A. No, I don't know.
0052
BRIAN J. WARD
Q. How do you recall this issue being brought to your attention?
A. It was a general issue in operating companies where technical staff were reviewing our reserves reporting processes.
Q. What was your understanding of the reserve reporting process in PDO at that time?
A. As far as I can recall it was a purely conventional reserves reporting process with a proven and expectation reserves.
Q. What was your understanding of the term proved reserves at that time?
A. The reserves had a

probability of existing of more than 85
percent.
Q. Was there any other criteria
that you were aware of for a reserve to
be considered a proved reserve at that
time?
A. No.
0053
BRIAN J. WARD
Q. Did you understand at that
time for there to be a difference
between proved developed and proved
undeveloped reserves?
A. No.
Q. Did you understand there to
be a difference between proved reserves
and expectation reserves at that time?
A. Yes.
Q. What did you understand the
difference to be?
A. The probability of 50
percent was applied to expectation
reserves.
Q. Do you now understand there
to be a difference between proved
developed and proved undeveloped
reserves?
A. I know the difference
between the two, yes.
Q. Do you recall when you
learned the difference?
A. I don't recall ever really
using that on a daily basis within
0054
BRIAN J. WARD
Shell. It wasn't a common parameter
that was used, but it was known.
Q. When did it become known to
you?
A. I can't recall.
Q. Is it something that you
recall ever being discussed while you
were in Oman?

A. No.
Q. When you were in Oman, did you have any responsibility for determining whether reserves could be considered proved?
A. Personal involvement, no.
Q. Did you have any other kind of involvement?
A. Only as overseer of the company.
Q. In your role as an overseer, did you have any responsibilities for overseeing the determination of whether reserves could be considered proved?
A. No.
Q. When you were in Oman, did
0055
BRIAN J. WARD
you understand there to be prerequisites for reserves to be considered proved?
A. Yes.
Q. What did you understand those prerequisites to be?
A. There were various criteria that our reservoir engineers used based on our reserve reporting guidelines.
Q. And do you recall whether or not you were aware what those guidelines were when you were in Oman?
A. I would be able to understand the technology that people would talk me through if there was a discussion about proven reserves, but I was never really -- I can't recall ever having a serious discussion about proved reserves there.
Q. Do you recall either -- strike that.
Do you recall prior to your time in Oman whether you received any formal training with respect to
0056

BRIAN J. WARD
reserve --
A. No, I didn't.
Q. -- categorization?
A. Sorry. No, I didn't.
Q. Have you subsequently received any formal training with respect to reserves categorization?
A. No, I haven't.
Q. Have you ever seen Shell Group guidelines with respect to reserves?
A. No, I haven't.
Q. When you were employed by Shell, were you aware of SEC Rule 4-10?
A. No.
Q. Are you aware of SEC Rule 4-10 now?
A. I am aware of criteria specified by the SEC for proved reserves reporting.
Q. How did you become aware of this -- that there were such criteria?
A. During the period 2000 to 2004 the awareness of the SEC
0057
BRIAN J. WARD
compliance within Shell started to -- within Shell outside the US I should say, started to become more widely known. So I guess the answer to your question is from about 2000 onwards, 2001 onwards.
Q. But prior to that time you had no awareness of there being such a rule as that --
A. No.
Q. -- correct?
A. Correct.
Q. Do you recall in the mid-1990s in Oman periods of production slow-down?
A. We had to work harder and

harder in terms of investment and
operations to maintain production, the
same production or increased
production.
Q. Did that require the
drilling of additional wells?
A. It did.
Q. And did this indicate an
0058
BRIAN J. WARD
underlying problem in your mind?
A. I wouldn't call it a
problem. I would call it a challenge
which every oil producer is faced with
at some time.
Q. Do you recall a point in
time when you realized that this was
not a -- this was going to become a
larger problem in Oman?
A. Yes, I do.
Q. And do you recall when
approximately that was?
A. Approximately '97.
Q. Do you recall whether or not
you had communications with Mr. Watts
about this underlying -- you didn't
want to call it a problem -- condition?
MS. LATIMER: Object to the
form.
Q. A challenge, you used the
term challenge. Do you recall whether
or not you had conversations with Mr.
Watts about this challenge?
MS. LATIMER: Object to the
0059
BRIAN J. WARD
form.
Q. You can answer the question.
A. In general, in general
terms, yes, because in our
relationships with the government and
the Sultan of Oman we had always been
able to show graphs of increasing

production with increasing reserves,
and this, as I said before, was going
to start coming to an end and that was
an issue that needed to be managed with
the government.
Q. Do you recall whether or not
during that time period -- I guess
we're talking about 1997; is that
correct?
A. As best I can recall, the --
the issue in terms of declining
production was tackled around 1997,
yes.
Q. And did it remain an issue
during the rest of your tenure at --
A. Correct.
Q. -- Oman?
0060
BRIAN J. WARD
A. Yes.
Q. And how were those concerns
addressed with the Government of Oman?
A. I reorganized the company so
that we had separate units looking
after different areas in Oman, and the
reason for doing that was to avoid
dependence upon a few large fields in
Oman at that time.
Q. Were there particular fields
that were becoming problematic?
A. There were three fields, one
of which, Ybal Field, was a major
problem.
Q. Why was it a problem?
A. Because we were running out
of drilling locations to drill to
increase production.
Q. As the production problems
were becoming more of an issue, do you
recall whether there were any
conversations with respect to any
implications on reserve reporting?
MR. CLARK: Objection;

0061
BRIAN J. WARD
mischaracterizes prior testimony.
Q. You can answer the question if you understand it.
A. Can you repeat the question, please.
Q. Sure. As the production problems were becoming more of an issue, do you recall whether there were any conversations with respect to any implications on reserve reporting?
MR. CLARK: Same objection.
A. I don't have any recollection of tying reserves particularly, or resource space particularly to production. The issue was developing that resource rather than not having the resource.
Q. What do you -- when you say the issue was developing the resource, can you explain what you mean by that?
A. Okay. There was a large number of fields in Oman. We had a considerable dependency on three or four major fields and the smaller
0062
BRIAN J. WARD
fields and more complex fields weren't at the same stage of development as the larger fields.
The issue was how much more effort did you need to be able to bring those smaller fields into play to replace the declining production from the bigger fields.
Q. And were conclusions reached about how much more effort would be required to bring those smaller fields into play to replace the declining production from the bigger fields?
A. Not during my tenure. We worked hard at it, we reorganized, but

the final solution came quite a long time after I left.
Q. And what was the final solution?
A. Lots more effort, lots more money.
Q. Now, during the 1999 time period do you recall there being an audit of PDO by the GRA, the Group
0063
BRIAN J. WARD
Reserves Auditor?
A. I don't recall it.
Q. Do you recall in 1999 that there was a view that the proved reserves that were coming out of PDO were too conservative?
A. Not in any other context than the overall issue around conservative reserve reporting.
Q. What do you mean by the context of the overall issue?
A. Earlier I mentioned that we had a concern within Shell, in the Shell Group that we were too conservative with our reserve reporting. So all the large operating companies were being looked at by our technical staff to see how we were doing it.
Q. Do you recall that Oman was being looked at?
A. In -- in terms of technical staff looking at how we were reporting, yes, I was aware that they were doing
0064
BRIAN J. WARD
that.
Q. And how were you -- how was it that you were aware that they were doing that?
A. We would get visits from technical staff to PDO.

Q. Do you recall having any discussions with Mr. Watts about how Oman was, or PDO was reporting reserves?
A. At that time, it was Mr. Moody-Stuart that I was reporting to, not Mr. Watts.
Q. When did Mr. Watts --
A. This was later, after I left -- sorry, no, it was about 1999, towards the end of my tenure in Oman that I started. Mr. Watts was replaced by Mr. -- sorry, Mr. Moody-Stuart was replaced by Mr. Watts.
Q. Do you recall having conversations -- what, if anything, do you recall about conversations with Mr. Moody-Stuart regarding the manner in
0065
BRIAN J. WARD
which PDO was reporting reserves?
A. I didn't have that conversation.
Q. Did you have any such conversations with Mr. Watts?
A. No, I didn't.
Q. Did you ever have any interaction with Mr. Watts about reserve reporting when you were in Oman?
A. Only to the extent that I've already explained in the sense that we had an issue with managing the Government of Oman whereby we had to either reduce our production or we had to spend a lot more money, both of which would have been highly unpalatable to the Government of Oman at that time.
Q. And do you recall Mr. Watts taking a view on that?
A. I don't recall Mr. Watts taking a view on that.

Q. And do you recall in 2000
0066
BRIAN J. WARD
there was an agreement made with the
Oman government to perform technical
and study work necessary in order for
PDO to revise its reserve estimates?
A. I was aware after I'd left
Oman in 1999 that we continued with
support for PDO from -- from The Hague,
but I wasn't involved.
Q. Do you recall that there was
a new methodology adopted in PDO in
order to increase proved reserves?
A. I remember there were
discussions about a new methodology.
My understanding and recollection is
that not a lot changed.
MS. MARSHALL: I'm going to
show you a document that we'll mark as
exhibit, Ward Exhibit 1 for
identification. It's marked Bates LON
00010726 through 728.
(Ward Exhibit 1 for
identification, Bates stamped LON
00010726 through 728.)
Q. You want to take a moment
0067
BRIAN J. WARD
and look through the document.
A. Thank you.
Q. To see if you're familiar
with it or you recognize it. Because
it's an email chain, the way the
document reads, I find, you may not
find this, if you look at the last
email and read that first.
A. Okay, thank you.
Q. I think it will be more
helpful.
MS. MARSHALL: For the
record, there's an attachment
referenced in the email that begins on

page Bates 10727 ending 10728. We were not able to locate the attachment in the manner in which the documents were produced.
MR. CLARK: Do you want him to look at all the emails, even the ones he's not on?
MS. MARSHALL: He doesn't need to look at the emails --
MR. CLARK: I think he's
0068
BRIAN J. WARD
only on the first one, right?
Q. Yes, I would like you to look at the one before that which is from Mr. Watson, just quickly.
A. Okay, I've read that one.
Q. Do you recognize this email exchange that begins on Bates Page 10727, it's an email dated August 1st, 1998 that appears to be from you?
A. Other than in the prep work for this deposition, no. I don't recall it.
Q. But you reviewed it in the last few days?
A. Yesterday.
Q. Do you recall the circumstances surrounding this email?
A. The -- my position was that reserves definitions within PDO at that time were not an issue, not a major issue which needed any sort of priority and should be sorted between the technical staff. So I felt comfortable that the issue would be sorted.
0069
BRIAN J. WARD
Q. Do you recall prior to this email -- well, first let me ask you who is Mr. Watson?
A. Mr. Watson was a colleague that worked for a regional

organization.
Q. Which regional organization?
A. Shell Group E&P regional organization -- no, sorry, it's not E&P. It's Shell Group regional organization where people were appointed to this group to oversee regions from outside the specific discipline, in my case E&P.
Q. And do you recall having discussions or correspondence with him regarding the reserve reporting guidelines?
A. No, I don't recall that.
Q. Do you recall the SIEP value creation team?
A. No, I don't recall them.
Q. Do you recall discussions about changes in reserve reporting
0070
BRIAN J. WARD
guidelines as it related to PDO?
A. I was aware of the general issue around reporting guidelines. I wasn't involved personally.
Q. If you look at this email, is it not a discussion about changes in reserve reporting guidelines?
A. It is.
Q. If you weren't involved in the issue around reserve reporting guidelines, do you have any idea why you would have drafted this email?
A. I wouldn't have drafted it.
Q. Okay. Do you know who would have drafted it?
A. My senior reservoir engineer probably, but I don't know the answer to that question.
Q. Do you know why you would have -- I mean it appears to be sent from you, correct?
A. Correct.

Q. Can you explain to me how this might have happened?
0071
BRIAN J. WARD
A. Quite often at a technical level the correspondence needed to be brought to a higher level for conclusion, and I guess this was one of those cases. I will have looked at it or I will have heard somebody tell me about it and I'll have said fine, go ahead.
Q. Okay. So you don't have any specific recollection of the implications of this discussion?
A. No.
Q. And you have no recollection of any inquiries from the value creation team regarding how PDO was reporting reserves?
A. No, they certainly, as far as I can recollect, didn't talk to me.
Q. Do you know who they would have talked to?
A. They would have talked to my technical people and reservoir engineers within PDO.
Q. And do you recall who those
0072
BRIAN J. WARD
reservoir engineers would have been?
A. Well, one of them was Chris Kennett because I remember him and he's on this email.
Q. Do you recall that at year end 2000 there was an increase in the reserves, proven reserves reported by PDO?
MR. CLARK: Are you asking about the year 2000?
MS. MARSHALL: Yes.
A. No, I don't recall.
Q. Do you recall at some point

there being a steep decline in production in PDO?
A. I was aware of a steep decline in production in PDO after I'd left.
Q. Was that in 2001?
A. That would be my guess, yes.
Q. Do you recall there being an agreement with the Government of Oman regarding expectation booking fees?
A. Yes, I do.
0073
BRIAN J. WARD
Q. What do you recall about that?
A. The principle of the discussion was the minister for oil and gas felt uncomfortable with paying for reserves bookings, which is part of our agreement with the government there and has been for many, many years. He seemed to feel that we were paying, they were paying twice for the oil, once when we found it in the ground and again paying us when we produced it.
Q. And at some point was there an exchange of -- where Shell had to pay $30 million --
A. I don't --
Q. -- in turn to the Oman government?
A. I don't recall that.
Q. Do you recall, and at this point I assume you were at EPG, a withdrawal of the 2002 business plan in Oman?
A. Sorry, could you repeat the
0074
BRIAN J. WARD
question.
Q. Do you recall learning that in 2001 PDO had to withdraw the 2002 business plan because of the decline in

production?
A. I was aware that they were going through considerable difficulties with respect to the business plan, but I wasn't involved.
Q. Do you recall whether when you were at PDO reserve -- reserves were part of how Shell looked at how well PDO was doing?
MR. CLARK: Objection; vagueness.
Q. You can answer the question.
MR. CLARK: If you understand it.
A. Reserves were part of our scorecard as I recall.
Q. And can you recall how they were part of the scorecard?
A. We were given a target of new reserves on the scorecard to
0075
BRIAN J. WARD
achieve during the year. That target would be based on our own planning.
MR. CLARK: Were you talking about proved or expectation reserves?
THE WITNESS: Expectation reserves.
Q. Was -- during the time that you were in Oman, were you able to meet those targets?
A. I can't recall. It would have changed over year to year.
Q. Okay. Do you recall any conversations regarding reserves in Oman, proved reserves in Oman that involved bringing proved reserves of mature fields in line with expectation reserves?
A. I don't recall that detail.
Q. How would you characterize your relationship with Mr. Watts while you were --

A. Business-like.
Q. How would you characterize your relationship with Mr. van de
0076
BRIAN J. WARD
Vijver?
A. Business-like. I had a certain affinity for Mr. van de Vijver. I think that was reciprocated.
Q. Did you ever hear anyone express a position that reserves booked during Watts's tenure as head of EP were aggressive?
MS. LATIMER: Object to the form. No foundation.
Q. You can answer the question.
A. I didn't hear that statement. I don't recall hearing that statement whilst he was in the E&P position.
Q. Did you ever hear that sentiment expressed after he left the E&P position?
MS. LATIMER: Same objection.
A. There was an issue whereby it was considered that perhaps we'd borrowed too much from the future or booked too aggressively, in your words,
0077
BRIAN J. WARD
which left us with a problem in booking reserves of the day because, if you like, they'd already been booked.
Q. And was that in any part attributed to Mr. Watts's tenure at EP?
MS. LATIMER: Object to the form.
A. These were the guys that were sitting on the chair, so the overall focus on our business and where we had to put our focus came from Mr. Watts, and Mr. van de Vijver later.

Q. So when you say that there was an issue whereby it was considered that perhaps we borrowed too much from the future which left us with a problem in booking reserves of the day because they'd already been booked, when was that issue first raised that you can recall?
A. When I first went on to the EP executive committee.
Q. And when was that?
A. 2001.
0078
BRIAN J. WARD
Q. And do you recall who first raised that at the executive committee level?
A. The issue of reserves -- perhaps a bit of background, can I give you a little background?
Q. That would be great.
A. We, for good or ill, had joined with other oil companies in presenting our results on a fairly frequent basis, and not only results, but targets. One of those targets was reserves, another one was production, another one was unit costs, and another one was return on capital employed. And we had clearly those particular parameters were in some cases mutually exclusive.
So indeed in the ExCom we used to discuss those particular issues on a frequent basis. It wasn't a one person, one issue type of deal. It was managing the company in general and how did we handle meeting targets with
0079
BRIAN J. WARD
conflicting performance indicators.
Q. And when you say that we had joined with other oil companies in

presenting our results on a fairly
frequent basis, when you say
presenting, can you describe what you
mean?
A. Sorry, presenting to
analysts.
Q. Okay. And do you recall
whether that had been a change that was
occurring at some point in time?
A. Yes.
Q. And do you recall when that
started happening?
A. I guess approximately at the
turn of the century, 2000. It was an
industry-wide trend with the exception
of Exxon Mobil, maybe some others that
I don't know of.
Q. Were you ever involved in
any analyst presentations?
A. No, I wasn't.
Q. Was it something that --
0080
BRIAN J. WARD
strike that.
When the issue of -- I want
to use your exact words or else I'm
going to get a series of objections, it
will just make it easier. So this will
take me a second to figure out how to
do this.
When you said that perhaps
the issue came up that perhaps you'd
borrowed too much from the future, was
that an issue that the company was
concerned was going to be picked up by
analysts?
A. That was a concern that we
were aware of because our reserves
replacement ratio stacked up poorly
against the competition at that time.
Q. And can you explain how the
reserve replacement ratio was
implicated by the issue of borrowing

too much from the future?
A. When you book reserves, there is a certain flexibility afforded to the company as to when they book
0081
BRIAN J. WARD
them, and it will depend upon the status of field development planning, appraisal well drilling and so on. You can use that flexibility to accelerate, for example, appraisal well drilling, to allow the company to book reserves earlier.
If your replacement ratio is low, clearly you want to book reserves in the year that it's low. If you have already taken those reserves and accelerated their booking into prior years, they're not available for you to book in the year where you have a problem with reserves replacement.
Q. When you say that there's a certain flexibility afforded to the company, where does this flexibility come from?
A. In every operating company they have field development exploration and appraisal plans in place. Depending on the resource applied, the time taken to execute those plans is X.
0082
BRIAN J. WARD
If you wish to apply more money and more resources, you can shorten the length of time it takes to execute those plans and therefore bring forward reserves bookings.
Q. Do you recall being aware of a correlation between the VAR process and reserve bookings back in 2001?
MR. CLARK: Objection to form.
Q. You can answer.

A. I'm aware of the correlation between the VAR process and reserves bookings, yes.
Q. What is the correlation?
A. We would expect at that time to have reached VAR and past VAR 3, which is concept selection, meaning that we've got a development plan in place before we would book the reserves.
Q. Do you recall a requirement -- do you recall discussions of a requirement for a final investment
0083
BRIAN J. WARD
decision as being part of the reserve booking process?
A. I recall that discussion, yes.
Q. What do you recall about that discussion?
A. I recall that it would be a more conservative approach, if we wished to take a more conservative approach, to book it FID rather than at VAR 3 level.
Q. Where -- when do you recall that discussion being had?
A. I don't think I recall any particular discussion on it. It was -- it was something that evolved as we went through the SEC awareness, compliance awareness, which was a evolutionary type of awareness on the group and on staff like myself.
Q. When you say the group, do you mean EP?
A. People in the operating companies and our technical people in
0084
BRIAN J. WARD
The Hague.
Q. And so for you that began in

2001?
A. It's difficult to pinpoint an exact time when I became aware, but I think it was later than that. I would say probably end 2001, beginning 2002 when the discussions around SEC compliance became more frequent.
Q. Do you recall there being a change in the Shell Group guidelines with respect to reserves in 1999/2000 time period?
A. No, I don't recall that.
Q. When you joined ExCom, do you recall in the conversations of perhaps there had been some borrowing from the future that there was any frustration as to whether Watts's success had any relation to his ability to meet or exceed reserve expectations?
MS. LATIMER: Object to the form.
Q. You can answer.
0085
BRIAN J. WARD
A. I have no personal recollection of that being stated.
Q. Do you recall any discussions about Watts's ability to meet or exceed reserve expectations when he was at EP?
MS. LATIMER: Object to the form.
A. I have difficulty in answering that question. I don't know the discussion that you refer to has taken place in Shell. I can't pinpoint where or when that discussion took place.
Q. Do you recall any of the individuals involved in any discussions on that subject that you were privy to?
A. The discussion around accelerating reserves bookings was

discussed quite frequently, as I've already said, in the ExCom. There was never explicit -- to my knowledge, there was never explicit statements that Watts's success had been a result

0086

BRIAN J. WARD

of these accelerated bookings.

Q. When the accelerated bookings were first discussed at ExCom, were there any questions raised about whether or not de-bookings would be necessary?

A. To the best of my recollection, at that time not.

Q. Do you recall whether or not when the discussions of accelerated bookings began there were any discussions with regard to the SEC reporting rule?

A. At the initial stages of these discussions I can't recall SEC compliance being involved.

Q. When the discussions of accelerated bookings first began, do you recall whether there were specific operating units that were discussed in relation to that happening?

A. I think -- I think it's important to note that we didn't discuss the words accelerated bookings.

0087

BRIAN J. WARD

What we did was we went through our resource base field by field on a regular basis once the reserves replacement ratio issue was there on the table to be fixed. And we would go through every one of our big fields in the group to see whether we could book reserves by doing -- taking more action in terms of drilling or what have you, and whether there was a risk to booked

reserves for whatever reason.
So this was a normal discussion and it didn't -- your words of accelerated bookings really came about because we would look at a field in Russia, for example, and we would say those reserves have already been booked and there's no upside there, next, and we would move on to the next field.
Q. When you said that we went through our resource base field by field on a regular basis and we would go through every one of our big fields
0088
BRIAN J. WARD
to see whether there was a -- you said whether there was a risk to be booked reserves. What did you mean by that?
A. With every field there was potential upside to book reserves. However, there could also be information that came in that may risk a booking that had already been planned, and therefore, you might not be able to book it. So, for example, you were due to sign an agreement with a government or you were due to drill a well or you were due to take some form of action which for whatever reason now looked unlikely to be happening. And that meant that those reserves which were to be booked in the plan were no longer going to be booked and therefore they were -- those reserves were at risk.
Q. Do you recall any instances at ExCom where bookings that were already made were considered questionable or at risk?
0089
BRIAN J. WARD
A. In the initial stages of my

tenure with the ExCom, I don't recall any fields where we felt that we had booked reserves and we would have to de-book them.
MS. MARSHALL: The videotape is going to need a switching, so we can just take a break now, that's fine.
THE VIDEO OPERATOR: This marks the end of tape number 1, of volume 1 in the deposition of Brian Ward. Going off the record, the time is 12:50.
(A recess was taken.)
THE VIDEO OPERATOR: Back on the record, here marks the beginning of tape 2, volume 1 in the video deposition of Brian Ward. The time is 12:21.
Q. Mr. Ward, do you recall when you joined EPG what was the situation with SPDC at that time? Were there any particular issues that were brought to your attention initially?
0090
BRIAN J. WARD
A. The handover that I had from Mr. Rothermund talked about the security issues largely in Nigeria.
Q. And what were the security issues?
A. Nigeria is in a constant state of foment, and the security of our staff in Nigeria is always threatened by this foment and violence.
Q. And were there any -- as a result of the security issues, were there any problems with respect to production issues?
A. There were always problems historically and to this day I guess with respect to local villages stopping field production in order to gain acquiescence to demands, for example.

Q. Were you aware there was a moratorium on bookings for Nigeria when you began your role at EPG?
A. I was aware.
Q. Do you recall when you first became aware of that moratorium?
0091
BRIAN J. WARD
MR. CLARK: I'm sorry, can we go back one question. You asked about Nigeria. Was your answer about Nigeria or SPDC?
THE WITNESS: SPDC.
Q. Thank you. And when did you become aware of that moratorium, if you recall, for SPDC?
A. I was aware of the moratorium from when I first went into EPG. I didn't tackle the issue until the end of, towards the end of 2002.
Q. Is that when there was a meeting, critical issues meeting?
A. Correct.
Q. Was that the title of the meeting?
A. Correct.
Q. And that was in November of 2002?
A. That's correct.
Q. So when you began your role at EPG did you have specific things that you were focusing on?
0092
BRIAN J. WARD
A. Yes. I was also looking after Europe and Argentina at the time, or South America. In Europe I was carrying on some work that I'd started in the NAM, which was to generate a Shell Europe, which consisted of an amalgamation of the various EP operating companies within Europe, and Nigeria was, as stated before, a

self-contained entity and that was not
at the top of my agenda at that time.
Q. Was there anybody who was
focusing on Nigeria at that time?
A. Nigeria at that time was
SPDC. We hadn't really started into
the offshore, deep offshore at that
time.
The management of SPDC at
that time would have been mainly done
with the managing director of SPDC
running a self-contained operation, and
prior to the reorganization that we
talked about earlier and the person
sitting in the EP role in The Hague.
0093
BRIAN J. WARD
So there would have been a lot of
communication between, for example,
Phil Watts and the managing director of
SPDC. I was pretty much at the
starting point before the
reorganization on the outside of that,
and I was concentrating on Europe.
Q. So do you recall when you
turned a focus towards Nigeria?
A. It came with, basically with
the reorganization. Nigeria was
problematic in -- in every respect for
-- for many reasons, and I was given
the task of CEO Africa and somebody
else took over for me in Europe, and
that was the time that I started to
concentrate on Nigeria.
Q. And do you recall, if you
can, what month and year that was?
A. It was all fairly seamless.
I can't recall. I mean somewhere
around beginning of 2002 I guess.
Q. And was there a process you
went through to familiarize yourself
0094
BRIAN J. WARD

with the issues that were present in Nigeria in SPDC at that time?
A. Yes. I went through -- I went through their business plan and their reports to bring myself up to date.
Q. How far back did you go?
A. Well I was fairly au fait with Nigeria, having worked there. Clearly I wasn't up to date with the politics and so on of the time and I had to bring myself up to that, but I didn't go back into history too much other than to look at the origin of some of the problems we were still dealing with.
Q. Did you gain an understanding as to why there was a moratorium put on bookings for SPDC in 2000?
A. Yes.
Q. And what was your understanding of that moratorium?
A. My understanding was that

the many development projects that we had planned to mature had not been matured in the time frame that we had planned, and as a result, the reserves bookings were considered to be too high, and in order to resolve that problem, it was decided to put the moratorium on reserves bookings so that the moratorium plus your production would equal, in a short space of time, the reserves that were booked which perhaps are not mature enough to have been booked.
Q. And how did you gain this understanding?
A. Around the 2019 issue? Or the -- no.

Q. No, what you just
described --
A. Okay.
Q. -- you learned that when you
became --
A. Yeah.
Q. -- head of EPG. Did you
0096
BRIAN J. WARD
learn that through discussions, or --
A. No.
Q. -- were you reading
documents, or was it something else?
A. It was from the documents
and one of my staff was asked to have a
look at the reserves and production
reconciliation.
Q. Do you recall who that was?
A. I do, yes.
Q. Who was it?
A. Phil Davis.
Q. And who asked Mr. Davis to
look at that issue?
A. I can't recall specifically,
but we had a small group in EPG of
maybe five or six people and we would
have agreed that we needed to do that.
Q. What was Phil Davis's role
at that time?
A. He was my number 2 man with
respect to basically the petroleum
engineering and planning side of the
business.
0097
BRIAN J. WARD
Q. And after he looked at the
reserve and production reconciliation,
how did he communicate his findings to
you?
A. I don't recall the exact
method that he communicated to me, but
he told me that there was clearly a
mismatch. However, this is now into --

into 2002.
Q. Okay. Do you know if he started looking at it in 2001 or was it 2002?
A. He -- he was involved with Nigeria prior to my taking over as CEO, yes.
Q. Had he been directed to specifically look at this prior to your taking over as CEO?
A. His job at that time was a regional business advisor supporting the reasonable -- regional business director, and his job was to advise the regional business director whether he felt the company was being managed
0098
BRIAN J. WARD
properly by looking at documents, going to meetings with the company and that sort of thing. So he would have picked this up in the normal course of his work.
Q. And do you recall whether this mismatch was communicated to ExCom around this time?
A. ExCom didn't exist at this time, but it would have been communicated by the managing director of SPDC to Phil Watts I guess at that time.
Q. So this is in -- what -- you don't have to -- I'm a little fuzzy on the dates. When did --
A. Me too, yes.
Q. Okay. When did ExCom come into existence?
A. The problem for me to give you a date is that prior to the ExCom it was called the business committee.
Q. Okay?
A. The BusCom.
0099

BRIAN J. WARD
Q. Okay.
A. And the BusCom became the ExCom.
Q. Was it structured similarly?
A. It was structured very similarly, but now the individual members had a much sharper and tighter accountability for performance.
Q. Was the head of the BusCom the head of EPG -- the head of EP?
A. Yes.
Q. So prior to being head of ExCom, Mr. Watts would have been head of BusCom?
A. Correct.
Q. When you moved into the role of head of EPG, was it BusCom or ExCom?
A. It was just becoming ExCom because Phil had moved to the MD position and Walter van de Vijver came in and took over the ExCom. So it had just happened I guess by the time I got there.
Q. Do you recall whether or not
0100
BRIAN J. WARD
Mr. van de Vijver would have ever been considered the head of BusCom, or by the time he assumed that position it was ExCom?
A. My --
Q. Or did that happen at the same time?
A. My understanding is he would have been head of ExCom rather than BusCom.
Q. Okay. Do you recall when you assumed the role at EPG having conversations regarding the problems with reconciling the reserves in SPDC with Mr. van de Vijver?
A. No.

Q. Do you recall whether that issue was ever brought to ExCom?
A. The issue of the moratorium was on the table prior to my arrival. We didn't discuss Nigeria or I didn't discuss Nigeria specifically with van de Vijver until I became CEO of Africa. And that was because, as I say, Nigeria was a
0101
BRIAN J. WARD
self- -- SPDC was a self-contained entity.
Q. So becoming -- I think this is -- I'm just getting confused. So when you were head of EPG you were not the CEO of Africa, they're not the same thing?
A. No.
Q. Okay. I'm sorry, it's just my confusion.
A. It is -- it is confusing because we're going through a transition process.
Q. Okay.
A. And I'm not doing a very good job of describing that transition process. Included in that is the fact that I came in in the middle of it all. So yes, it's difficult, but I came in, took over from Heinz Rothermund when he was a regional business director, not a CEO.
Q. Okay.
A. And that was for a short
0102
BRIAN J. WARD
period of time when he had responsibilities for Nigeria which were really nonexistent because Nigeria was self-contained. He had responsibilities for Europe and for South America. That's what I took over on day 1 from Heinz Rothermund. I then

concentrated on Europe. Then this process came to the regional business director to CEO transformation happened, and the ExCom was formed from the BusCom and then I took off as the CEO of Africa.
    Q. Okay, thank you. So when you were the CEO of Africa, is that when you first recall having conversations with Mr. Davis about the reserve situation in SPDC?
    A. I'd had conversations with him beforehand about the general state of affairs in Nigeria, but at that time I wasn't taking any specific action. I was just being informed.
    Q. And had he begun the process
0103
BRIAN J. WARD
of trying to reconcile the reserves in SPDC when you first joined EPG prior to becoming the CEO of Africa?
    A. He had no resources to be able to start reconciliation himself. He could only point out to the management or the technical people within SPDC that he felt there was something wrong with this reconciliation and had they look at it and could he get some information, that sort of process.
    Q. And do you recall whether or not that was discussed at BusCom?
    A. As I said, the moratorium happened prior to my arrival and it had therefore had to have been on the table. I was not involved.
    Q. Okay. When he began -- when you moved to the role and the reorganization had you as the CEO of Africa, did you have more in-depth conversations with him about the reconciliation of reserves in SPDC?

0104
BRIAN J. WARD
A. Yes, I did.
Q. And do you recall how those conversations started?
A. The conversations that I would have with Phil Davis would be around a variety of issues which he felt needed to be managed better in SPDC. At about this stage, and with the authority of the CEO position now in place, I called a meeting of their management team in The Hague in November 2002, and the objective of that meeting was to spend a day to discuss and prioritize the key issues which we needed to focus on in order to manage SPDC better. One of those issues was reserves.
Q. And what do you recall about the discussions on reserves from that meeting?
A. We -- we agreed that one of the key parameters we need to clarify was 2019 extension because if we could get that away, out of the way, then we
0105
BRIAN J. WARD
had a much clearer run at resolving the -- any -- any issues arising out of our reserves work, but we also agreed that we needed to start a revamp of our total technical work on the reserves in SPDC. When I say reserves, I'm talking expectation reserves.
Q. And when you say we had a much clearer run at resolving any issues arising out of our reserves work, can you explain what you mean by that?
A. The 2019 end of license had been used to define the moratorium, and it was used continually in discussions

with respect to the reserves position. The reserves position in Nigeria during the period 2000, or even prior to 2000, up until my retirement, was a highly complex network of conflicting forces. It was not, and I think it's very important to understand this, it was not a question of we have a field here with some reserves in, let's just check

0106

BRIAN J. WARD

out that the figure's okay.

For a start, the complexity of the numbers of fields, blocks and reservoirs and wells would eventually ended up with thousands. We had problems with reconciling our supply to LNG, whether it was nonassociated gas or associated gas that was going to do it. If it was associated gas that meant certain field developments had to be in place in time for that associated gas to be available. So to get it to gas you produce with the oil.

We had a 2008 deadline for flaring gas which reflected back straight away to the associated gas and the development of the oil fields that produced that associated gas.

We had a problem with all our plans being either deferred or reduced or both because of lack of funding from the government.

So the picture I'm trying to present to you is one of a very complex

0107

BRIAN J. WARD

network of conflicting factors here. It was not a reservoir engineering issue per se.

Q. And was that complexity of issues immediately apparent?

A. The key forces playing in

that complexity were immediately apparent. What their impact was and how they interrelated certainly was not.
Q. And was it -- when you were charged with the role of being CEO of Africa, was straightening out these issues one of your main focuses?
A. It was my top priority.
MS. MARSHALL: I think it's the time that we said we were going to break, so if you want to do that, that's fine.
MR. FERRARA: Great.
THE VIDEO OPERATOR: Going off the record, the time is 12:45.
(Lunch recess: 12:45 p.m.)

0108

BRIAN J. WARD
A F T E R N O O N S E S S I O N
1:40 p.m.
THE VIDEO OPERATOR: Going back on the record, the time is 13:40.
B R I A N J. W A R D,
resumed, having been previously duly sworn, was examined and testified further as follows:
CONTINUED EXAMINATION
BY MS. MARSHALL:
Q. Who attended the critical issues meeting in November 2002, if you recall?
A. The EPG team and the senior management from SPDC.
Q. And were future production forecasts for SPDC discussed?
A. Not per se. Clearly, issues surrounding the effectiveness of operations affected production, and the objective of enhancing the efficiency of the operation would improve production.

Q. Was there a discrepancy in
0109
BRIAN J. WARD
SPDC between production and production forecasts, actual production and production forecasts?
A. Yes, and on a continual basis.
Q. And what was the discrepancy?
A. The discrepancy was that we never achieved the production forecast in any one year and we always had to carry forward that production forecast.
Q. And what do you attribute the discrepancy to?
A. Most significantly would be the lack of investment by the government, which curtailed our plan.
Q. Were OPEC quotas an issue?
A. They were a peripheral issue.
Q. How is that?
A. The -- in principle, we could find ourselves in a position where we'd invested a large amount of money into increased production and
0110
BRIAN J. WARD
that production would have to stay in the ground simply because Nigeria had an OPEC agreement. In practice, the OPEC agreement really never bit in Nigeria.
Q. Practically, how did the -- were production forecasts made prior to, or independent of discussions with the Nigerian government with respect to their funding?
A. The process would be that we would present a plan to government and they would agree to a budget. Often the budget would be agreed, would be

the one we'd ask for. As time went on, that became less and less, but regardless of what they agreed to, how much they actually invested was something else.
Q. Did Shell not take that into consideration when making production forecasts?
A. Certainly.
MR. CLARK: Certainly it did
0111
BRIAN J. WARD
or certainly it didn't?
A. Certainly they took it into consideration, but of course to try to forecast what the government was going to do in any particular year was extremely difficult.
Q. Was the reserve replacement ratio discussed at this meeting?
A. No.
Q. Was the reserve replacement ratio a top issue at EP in 2002?
A. The reserve replacement ratio was one of the four key parameters we discussed earlier, and it was a common topic on the ExCom agenda.
Q. Did SPDC ever factor into those discussions?
A. The one overriding factor around SPDC was the reserves issue was a technical issue, it was not anything to do with the base resources available in the country. There were huge resources available in the country. The question was rather were we at some
0112
BRIAN J. WARD
sort of maturity with a particular project to book those reserves in a particular field.
So the discussion wasn't around reserves per se, it was much

more around the operation itself.
Q. Was the business plan issue separate from the question of the license expiry problem?
A. We hadn't got close enough to the license limit for it to have a major effect on our planning at that time.
Q. And did at some point the -- did at some point you receive guidance that the license expiry issue shouldn't be considered a major source of concern with respect to booking reserves?
A. That's correct.
Q. Do you recall when that was?
A. It -- I can't recall exactly when it was. The issue was kicked off to be resolved at the critical issues meeting in November, and we took

guidance on the legality of extension and that guidance that came back to us was that as long as we had performed our role as a prudent operator then we had a right to a license extension.
Q. Did the SPDC business plan that was in place in late 2002 and early 2003 include the use of associated gas techniques?
A. All business plans with respect to the development of oil fields had to include the management of produced associated gas.
Q. And was there -- is there separate funding for associated gas in a business plan?
A. No. The funding was embedded in the oil development funding.
Q. Was there ever an issue about whether there was adequate funding for the associated gas in SPDC?

A. There was an issue to the
extent that we had hoped that the large
0114
BRIAN J. WARD
part of the supply to the LNG plants
would be associated gas. If we were
unable to fund the development of the
oil fields then de facto we were short
of associated gas to supply to the LNG
plant.
Q. Were you able to have --
were you able to fund the development
of the oil fields as --
A. No.
Q. -- as the business plan had
anticipated?
A. No.
Q. Why was that?
A. Because we didn't get
adequate funding from the government
for their 55 percent share.
Q. And when was that made
clear?
A. It was a continuous process.
Q. When the -- when you had
been advised that the license expiry
issue had been resolved with respect to
reserves, were reserves still an issue
0115
BRIAN J. WARD
that Mr. Davis was looking at?
A. Reserves and field
management were a considerable problem
in Nigeria from the technical point of
view and continued to be for all the
time that I was CEO.
Q. After the meeting in
November of 2002, was any -- were any
specific actions taken as a result of
that meeting?
A. A large number of specific
actions.
Q. Do you recall what any of

them were?
A. I guess I recall that each of the focal points for the critical -- each of the critical issues was tasked with putting a plan together to resolve those issues.
Q. And do you recall what plan was put together with respect to future production forecasts?
A. The production forecast issue was a consequence, not a -- it
0116
BRIAN J. WARD
was a consequence of not having plans in place because of funding from the government. So one of the actions that we had in place was to get better relations with the government to be able to work on the funding, or alternative funding means.
Another effect on the production was the efficiency of our operations and we had a set of plans to improve the efficiency of our operations.
Q. Did the situation change significantly with respect to the government and funding as a result of those actions?
A. We had several very good meetings with the government, but the bottom line was that the difficulties with respect to funding remained.
Q. Do you recall whether or not the SEC rule regarding reserve reporting was discussed at all during this meeting?
0117
BRIAN J. WARD
A. It was not to my recollection.
Q. I'm going to show you a document which we'll mark as Ward

Exhibit number 2 for identification.
It has Bates V 00120472 through 485.
It's an email and then has a note for
information, CMD 11th February 2002
attached.
(Ward Exhibit 2 for
identification, Bates stamped V
00120472 through 485.)
Q. If you'd take a moment and
look at the document. We're not going
to go through every single page of the
document by any means, so I'm trying to
figure out to what extent -- I don't
know if you've reviewed this recently,
but if you haven't, if you just want to
look at it to the extent that you can
see if you've seen it before. Maybe
you should --
MR. FERRARA: Are there any
pages in particular you'd like him to
0118
BRIAN J. WARD
focus on?
Q. In this second page of the
CMD note it talks about exposures. Why
don't you read to -- read that section
and competitive landscape under
appraisals on the next page.
MR. FERRARA: So do you want
to direct our attention anywhere?
Q. Do you recognize this
document?
A. I haven't seen this document
before.
Q. If we look at the first page
this appears to be an email from Lorin
Brass and you're one of the recipients;
is that correct? It's dated February
20th, 2002?
A. Yes.
Q. If you look at the first
page of the attachment it says "Note
for information, CMD, February 11th,

2002." Can you tell me generally what
a note for information is as it's used
within the company?
0119
BRIAN J. WARD
A. It's exactly what it says in
the sense that it's information passing
and it's not requiring a decision.
Q. Typically are notes for
information addressed to particular
groups or group within the company?
A. Yes.
Q. And typically, what group or
groups are they addressed to, or
circulated amongst?
A. Usually the executive
committee level or the CMD.
Q. So in this case were you a
member of the CMD ever?
A. No.
Q. If you look at the email
there's a list of individuals. Were
those individuals members of ExCom?
A. Most of them, yes.
Q. Would it have been typical
for you to receive a note for
information such as this?
A. Reasonably frequently, yes.
Q. Okay. Do you have any
0120
BRIAN J. WARD
reason to doubt that you received this
note for information?
A. I've no reason to doubt it.
Q. Okay. When you received
notes for information did you typically
review them?
A. It would depend very much on
the workload at the time and whether I
felt that my particular region was
implicated in the actions or proposals
or whatever that were in the note for
information.

Q. Do you recall whether or not
you reviewed this particular note?
A. No, I -- I don't recall the
note at all.
Q. Might you have reviewed it,
or are you --
A. I may -- I may have scanned
through it.
Q. Okay. You just don't recall
either way?
A. I just don't recall.
Q. Okay, fine. If you look to
0121
BRIAN J. WARD
the bottom of the second page of the
note it says "Exposures." Where it
reads "Securities & Exchange Commission
SEC alignment," do you recall reading,
or do you recall -- since you don't
recall whether you read this note at
all, do you recall ever learning that
there was a view that the group
guidelines for proved reserves bookings
are no longer fully aligned with the
SEC rules?
A. I was aware of that, yes.
Q. Do you recall how you became
aware of that?
A. It was an evolutionary
process over these years that we're
talking about. The gravity of the
situation with respect to misalignment
of our reserves reporting and the SEC
rules, the gravity of the consequences
were not known to people like myself
and my colleagues, we're colleagues,
way into -- until way into 2003. Up
until that time the issue was treated
0122
BRIAN J. WARD
very much as something that had to be
fixed. It would probably be
administrative, but we had no inkling

that -- that the gravity of the
situation was as it was going to turn
out to be.
Q. Prior to this time period
did you -- strike that.
Do you recall that Angola
was one of the areas that were of
potential concern regarding the
alignment of the reserves with the SEC
rule?
A. No.
Q. Did you ever become aware
that there was an issue with proved
reserves that had been reported for
Angola with respect to the alignment
with the SEC rule?
A. I can't recall.
Q. Was Angola one of the areas
in your control, or --
A. It was. Sorry.
Q. That's fine.
0123
BRIAN J. WARD
A. It was. I came in -- onto
the scene when the reserves or the
maturity of the field development had
reached more or less the end of its
appraisal stage. BP were the operator.
I therefore didn't have the operational
responsibility like I did in other
operating companies.
Q. Do you recall being advised
about whether or not proved reserves
had been booked in Angola?
A. I don't recall.
Q. Do you ever recall learning
that reserves that had been booked as
proved in Angola were eventually
recategorized?
MR. CLARK: Objection; lack
of foundation.
A. I don't recall that
happening.

Q. When you became the CEO for Africa, did you ever endeavor to look at the reserves that had been booked in the different geographical locations

0124

BRIAN J. WARD

under your control?
A. Could you repeat the question.
Q. Sure. I'll rephrase it.
When you came on as CEO of Africa, did you -- what, if anything, did you do to familiarize yourself with what had been going on in Angola in recent years?
A. The issue that I was confronted with in Angola was a discrepancy in our forecasts for costs and for reserves expectations with BP, the operator, and that's what I dealt with.
Q. And what actions did you take to deal with that?
A. We divested.
Q. When you were looking at what to do in Angola, were you aware that reserves had been booked, proved reserves had been booked for Angola field 18?
A. Block 18. I wasn't aware

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BRIAN J. WARD

that they had been booked, but then this would have been put into our reserves booking tabulations. I wouldn't necessarily have come across it. But I simply wasn't aware of the proved reserves that had been booked for Angola or the de-booking.
Q. When you were first appraised of what was going on in Angola and block 18, do you recall what stage Block 18 was in terms of its

development?
A. We had more or less completed the appraisal drilling and we had about firmed up the manner in which we were going to develop the field with an FPSO, floating production storage unit, and there was still several outstanding negotiations with the Angolan government.
Q. Had a final decision been made as to whether or not the field should -- Block 18 should be developed?
A. At that time, no. Later on,
0126
BRIAN J. WARD
BP took a sole risk decision to go ahead and we had a period of time whether to join in or back out.
Q. And the decision was to back out?
A. No, the decision was to join in.
Q. And what happened after that?
A. After that we tried, we worked hard on a technical level to reconcile our differences and to convince BP to resolve some of the outstanding issues prior to making large, irreversible expenditures.
Q. And what was the final conclusion?
A. The final conclusion was that BP were going to go ahead anyway and we divested our share of Angola Block 18.
Q. And do you ever recall any conversations of any implications that would have on the reserves that had
0127
BRIAN J. WARD
been booked for Angola?
A. I recall that divesting

Block 18 would require that we
de-booked the reserves.
Q. When was the decision made
to divest in Angola?
A. I can't recall.
Q. Do you know why Angola was
included on this list of potentially
exposed legacy reserve bookings in
February of 2002?
MR. CLARK: Objection to
form.
Q. If you look at the bottom of
the second page of the note it says,
"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
0128
BRIAN J. WARD
showstoppers exist." So my question to
you is whether you have any
understanding why Angola was included?
A. I can't speak for whoever
wrote this particular paragraph. The
-- there were outstanding issues with
the government which had not been
resolved, would have cost a large
amount of money if they were resolved
to the government's favor, and it could
have been.
Q. Okay, in the second
paragraph under that one it says "End
of license." It says "In Oman PDO, Abu
Dhabi and Nigeria, SPDC, 18 percent of
EP's current production, no further
proved reserves can be booked since
it's no longer reasonably certain that
the proved reserves will be produced

within license." Do you recall
discussions regarding this issue in
February of 2002?
MR. CLARK: Objection to
form.
0129
BRIAN J. WARD
A. Sorry, can you be more
specific with the question.
Q. Sure. Do you recall
discussing the end of license, proved
reserve booking issue in Nigeria SPDC
in February of 2002?
A. I don't recall that specific
date, but it was an issue that was
discussed on various occasions.
Q. I'm going to show you a
document which we'll mark as Exhibit
number 3 for identification. It's
Bates LON 01830061 through 64. Sorry,
60 through 64, sorry.
(Ward Exhibit 3 for
identification, Bates stamped LON
01830060 through 64.)
Q. It's not that long of a
document so you might just review the
whole thing.
MR. FERRARA: Did you --
Q. I've asked him just to
review the document. Have you had a
chance to review it?
0130
BRIAN J. WARD
A. I've scanned it, yes.
MR. CLARK: Have you
reviewed it to your satisfaction?
THE WITNESS: I think so. I
haven't looked at the diagrams yet.
Q. I'm not going to go into the
diagrams in any detail.
MR. CLARK: Just take a look
at it.
A. Okay.

Q. Do you recognize this correspondence?
A. I recognize the content.
Q. What do you recall about the content of these emails?
A. There was --
Q. Or the content of the discussions surrounding these emails?
A. Okay. There was continual discussion around the booking of reserves for future LNG trains, imminent train 3 and future trains 4 and 5. The booking of reserves was part of the complex web that we talked
0131
BRIAN J. WARD
about earlier, because it depended on the split between unassociated and associated gas reserves, and also the reserves that we carried for domestic consumption. And the reserves that we carried for domestic consumption looked inflated at that time because many of the projects which we were asked to provide gas for simply didn't get off the ground.
That was the background to it.
Q. Why didn't the projects get off the ground?
A. I can't answer the question because these were projects for all sorts of ancillary type industries which I had nothing to do with. It was usually financing.
Q. What was -- had -- was there a time that the trains 4 and 5 bookings were made for those reserves?
A. I don't recall.
Q. In the email at the bottom
0132
BRIAN J. WARD
of the first page of the exhibit it's

from Mr. Duhon to yourself and Mr.
Davis is cc'd. He writes towards the
bottom, "The basic story is a familiar
theme: There is already an excess of
gas reserves on the books that
implicitly cover the T 4 to 5 volumes."
Do you understand what he meant by
that?
A. The complexity of the
situation with respect to these gas
reserves was such that we had to be
very careful we didn't double book.
When you were looking at the LNG
developments from a gas ExCom point of
view, as Linda Cook was doing in this
particular email, she was saying, hey,
guys, I've developed two trains, surely
this means that you can book reserves
against this commercial venture.
What she wasn't aware of was
the complexity of the various issues
that we were dealing with in SPDC with
respect to the totality of the reserves
0133
BRIAN J. WARD
which were all interrelated. Hence the
confusion why can't we book reserves
for T 4/T 5, because we don't have a
clear understanding in our own mind
whether that's appropriate or not, from
my side.
Q. And why might it not have
been appropriate?
A. Because if we had decided,
if we did decide, as we did at a
certain stage, that the domestic gas
supplies already figuring in the
reserves were excessive they would be
offset against whatever you would have
booked for T 4 and T 5.
Q. And why might the reserves
from the domestic gas supply might have
been excessive?

A. We had booked in our plan against contracts which were either signed or about to be signed for various industries, and those industries never came into being. Or if they did, they came in much later or

0134

BRIAN J. WARD

smaller.

Q. Okay. And were these issues issues that were discussed generally with ExCom?

A. They were discussed in ExCom, but not on a general frequent basis certainly.

Q. What were the lines of communication like between yourself and Mr. van de Vijver in 2002 to 2003?

A. My modus operandi was that if I was to take any decision which I felt was potentially affecting the group position I would always seek Mr. van de Vijver's okay before I did it.

Q. And did he ever communicate with you directly regarding any issues or problems that he wanted to bring to your attention?

A. Yes, he did.

Q. Do you recall any specific instances of that with regard to reserves?

A. With regard to reserves?

0135

BRIAN J. WARD

The reserves issue was discussed repeatedly in the ExCom. He wouldn't necessarily have phoned me directly. I mean we -- we discussed the issue of reserves replacement many times.

Q. Do you recall the first time you heard mention of the question of whether de-bookings would be necessary in any of the locations within your

regional control?
A. This is de-bookings of proved reserves that have already been booked?
Q. Yes.
A. Those discussions, to the best of my recollection, started to happen in the second half of 2003, excluding A&D. That's acquisition and divestment.
Q. Do you recall the context of the first discussions of de-booking of proved reserves?
A. No, I don't recall that.
Q. Do you recall who first
0136
BRIAN J. WARD
brought it up?
A. No, I don't recall that.
Q. I'm going to show you a document which we'll mark as Exhibit number 4 for identification. It's Bates V 00230705 through 721.
(Ward Exhibit 4 for identification, Bates stamped V 00230705 through 721.)
Q. It's a long document, so I'll just first ask if you recognize it and then I'm going to direct you to specific pages.
A. I recognize the content.
Q. Now beginning on the second page of the exhibit it says "Note to CMD, Nigeria country review 2002." Do you know who created this document?
A. I'm sorry, I missed the question.
Q. Who created this document?
A. This was done by Frank Denelle who worked in our regional office.
0137
BRIAN J. WARD

Q. What was his role?
A. His role was to provide an overview across upstream/downstream manufacturing in any given particular area.
Q. Do you know why this document was created?
A. The document was a country review document which was created on a regular basis for all our investment areas.
Q. How frequently would these reviews be done for each area?
A. Probably every two years.
Q. And then Mr. van de Vijver would submit the reviews to the CMD?
A. Yes.
Q. Do you recall whether or not you reviewed this document prior to it being issued to the CMD?
A. I can't recall reviewing the document.
Q. Do you recall viewing other documents like this one?
0138
BRIAN J. WARD
A. I recall in generic terms reviewing documents and reviewing proposals people like Frank Denelle would submit about my areas of operation, yes, as a generic answer.
MR. CLARK: Before they were issued to the recipients or after?
THE WITNESS: Before they were. I would usually be asked to comment.
Q. Okay. Is it likely that you were asked to comment on this note prior to it being issued?
A. It's likely.
Q. If you look at the sixth paragraph at the bottom it says, "Shell's production is currently

constrained by OPEC quota restrictions and proved reserves have been subject to a booking moratorium since 2000, reflecting delays in delivery of the growth plan." Do you agree with that statement?
A. In principle I agree with

0139

BRIAN J. WARD

the statement. In practice the constraint by the OPEC quota was minimal.
Q. Was the EA -- in the -- like two paragraphs after that it says, "There are key milestones associated with growth delivery in the next 18 months - start up of EA and Bonga, Nigeria elections, developments on OPEC and quota." Was the EA Field a part of SPDC?
A. Yes.
Q. Was that a shallow water field?
A. Yes.
Q. Do you know whether or not SDS ever provided any technical assistance with respect to the work that was done on that field?
A. I am not aware that SDS provided any technical assistance. I am aware that the project manager and team for this development was in Nigeria.

0140

BRIAN J. WARD

Q. Okay. And the Bonga project was part of SNEPCO?
A. Bonga was part of SNEPCO.
Q. And Shell Deepwater Services worked on the Bonga project, correct?
A. Shell -- Shell Deepwater Services had two -- had two inputs to Bonga project. One was that the basin

study geology work and seismic work had been done by SDS technical people in the exploration stage, and they provided some advice to the Bonga project itself for the development of the field.
Q. Do you have any knowledge about whether or not the reserves from the EA Field were recategorized or restated?
A. No.
MR. CLARK: Objection; lack of foundation. The answer is no.
Q. If you look at Page 11 of the note, which is Bates 230716, where it says -- paragraph 3.8 --
0141
BRIAN J. WARD
MR. CLARK: Do you want a minute to look at this page, have you had a chance?
A. Am I being asked to read paragraph 3.8?
Q. Yes.
A. Yes.
Q. Is a growth program the same as a business plan?
A. Yes.
Q. Okay. Was this your understanding -- does this, what's written in this paragraph reflect your understanding at the time, or is it consistent with your understanding at the time?
A. It's consistent.
Q. Okay. Do you recall ever having any conversations at the ExCom level about the risk of de-booking with regard to the SPDC proved oil reserves in this time period? I think it's stated at the end of the document, which is May of 2002, 30 May 2002.
0142

BRIAN J. WARD
MR. CLARK: Objection; asked and answered.
Q. The date is before the -- it's Page 14 of the document.
A. Okay. I can't -- I'm unable to confirm or otherwise dates for these sorts of discussions. We held discussions on these things on a regular basis. The intensity of those discussions would be high or low depending on what other priorities were on the agenda. I can't -- I can't specifically -- specify.
Clearly as time moved through 2002 and 2003 and the SEC issue started to loom large towards the end of 2003 the word de-bookings became more prevalent in the discussions. To start, I'm unable to specify dates on these things.
Q. Do you recall Mr. Watts being part of the conversations regarding de-bookings at any time?
A. No.
0143
BRIAN J. WARD
Q. Did you make any presentations to the CMD during this time period, 2002/2003, if you recall?
A. I made one presentation to the CMD.
Q. When was that?
A. I can't remember.
Q. Do you recall what the presentation regarded?
A. Clearly about SPDC and Nigeria, and I put in a document about the critical, critical projects that we were working on, but I'm speculating.
MR. CLARK: Hold on one second.
(Witness and counsel confer.)

MR. CLARK: When we finish this document maybe we'll take a five minute break.
MS. MARSHALL: Okay.
Q. Do you recall what the critical projects that you were working on at the time in SPDC that was the subject of the presentation to the CMD?
0144
BRIAN J. WARD
A. I don't recall clearly.
Q. Okay. Do you have any vague recollection?
A. I have a vague recollection, yes.
Q. What's your vague recollection?
A. That I was asked to report back to the CMD on some issues regarding SPDC.
Q. If you look at the next page of the document there's a chart here.
A. Yes.
Q. Do you recognize this chart?
A. Yes, I recognize the chart.
Q. And can you explain it, please?
A. It simply shows what we used to call the horsetail effect, where the business plan production forecasts were delayed by a year every year, with an overall declining trend in production.
Q. And to what did you attribute the overall declining trend
0145
BRIAN J. WARD
in production?
A. The lack of investment into our fields and the inefficiency of our operations in Nigeria.
I should also add the difficulty of running these fields in a violent and unrest situation.

MS. MARSHALL: Okay. We can take a break now, thank you.
MR. CLARK: Great.
THE VIDEO OPERATOR: This marks the end of tape number 2, volume 1, in the video deposition of Brian Ward. Going off the record, the time is 14:39.
(A recess was taken.)
THE VIDEO OPERATOR: Back on the record. Here marks the beginning of tape number 3, volume 1 in the video deposition of Brian Ward. The time is 14:56.
Q. Mr. Ward, I'm going to mark as Exhibit number 5 a document that was produced in native format. The

document ID number is 101328316 and it is a three-page document.
(Ward Exhibit 5 for identification, ID number 101328316.)
Q. I'm not going to go into detail about the lengthy email on the second page. I just -- if you could look at it to the extent that you need to to familiarize yourself with the discussion that was going on surrounding the email.
A. I saw this document yesterday.
Q. And you had an opportunity to review it?
A. Yes.
Q. Do you recall this exchange?
A. I recall the exchange, yes.
Q. What is your recollection of what were the circumstances surrounding this correspondence?
A. The -- the MD of SNEPCO had had a reserves audit done on the offshore deep fields and they had

0147
BRIAN J. WARD
recommended a de-booking. Kisito Okpere who's the MD wrote to me and basically stated that he was going to de-book a certain number of reserves as a result of the audit. I said hold -- hold on a minute, we need to look at the wider spectrum of events around this before we start de-booking simply because there was no doubt in our minds that the oil was there. It seemed inefficient, incorrect to de-book and then re-book afterwards. So I wanted to be sure before we agreed to it that there was no reasonable alternative to de-booking.
Q. What ultimately happened?
A. We de-booked.
Q. Do you know when that was?
A. No.
Q. Was it in 2002?
A. I don't recall which year it was in.
Q. Okay. If you look at the email you wrote, the second line says
0148
BRIAN J. WARD
"The de-booking of reserves must be endorsed by myself and ExCom before any action is taken." Was there a formal process that needed to be completed for there to be a de-booking of reserves?
A. It wasn't so much a formal process. It was the fact that other areas within the organization, within the Shell organization were involved in booking and de-booking reserves. We couldn't do it unilaterally.
Q. When you mean other areas?
A. Technical review people, our finance people would have wanted to be involved in de-booking of reserves and

so on.
Q. Were those same people involved every time there was a booking of reserves?
A. No.
Q. Why is that?
A. Booking of reserves was a normal, every day process coming out of operating companies as they went
0149
BRIAN J. WARD
through their plan.
MR. CLARK: Are you speaking about expectation reserves now?
THE WITNESS: Expectation reserves.
MS. MARSHALL: I'd appreciate if you want to ask him questions that you do that at a different time.
MR. CLARK: It's just the record is really unclear between expectation and proved today.
A. When I'm talking about reserves I'm talking about expectation reserves.
Q. Well, we've been talking about reserves, we've been talking about proved reserves.
A. Okay.
Q. And we've been talking about expectation reserves. So I don't think actually it's fair to say that every time you've said reserves you've meant expectation reserves. I don't think we need to debate that right now.
0150
BRIAN J. WARD
MR. CLARK: You're right, because that's what he just said.
Q. When reserves are, proved reserves are booked does that -- did that need to be endorsed by yourself and ExCom?

A. No.
Q. When proved reserves were de-booked, did you believe that's something that should have been endorsed by yourself and ExCom --
A. I did, yes.
Q. -- before it being done?
A. I did, yes. If it was a significant amount, yes.
Q. When the -- with respect to reserves and the terms technical or commercial maturity, does that describe -- are those terms that are used with respect to proved reserves?
A. They are used with respect to the booking of proved reserves.
Q. So in this exchange on the bottom of the first page where it says
0151
BRIAN J. WARD
"He did not feel that Bonga SW was technically or commercially mature enough for a booking on 1/1/2003," is that referring to a booking of proved reserves, if you know?
MR. CLARK: Objection.
Q. Looking at the bottom of the first page of the document.
A. In our books we carry proven and expectation reserves, and the proven reserves require more stringent and formalized.
Q. Such as technical and commercial maturity?
A. I think that the -- they certainly would include technical and commercial maturity, yes.
Q. At the bottom of this page it says "Apparently, SEC frowns at the practice of linking remuneration through scorecard targets to proven reserves because it tends to encourage inflation of reserves, or asset value,

without strict compliance to the SEC
0152
BRIAN J. WARD
guidelines. I believe this is an action for SIEP to implement group-wide." Do you ever recall any conversations regarding this particular issue?
MR. CLARK: So the record is clear, I think we're talking about a differently formatted document. That sentence which you've read into the record appears on the second page of this email.
MS. MARSHALL: Oh, okay, I have a different copy. I'll get the same copy.
MR. CLARK: I just don't want the witness to be confused.
MS. MARSHALL: Thanks.
MR. CLARK: I apologize, but maybe you can restate the question.
Q. Okay. At the top of the second page, the first -- there's an asterisk?
A. Yes.
Q. It says "Apparently, SEC
0153
BRIAN J. WARD
frowns at the practice of linking remuneration through scorecard targets to proven reserves because it tends to encourage inflation of reserves, or asset value, without strict compliance to the SEC guidelines. I believe this is an action for SIEP to implement group-wide." Do you recall any conversations regarding this particular issue?
A. Not until -- I do recall conversations, but not until late 2003/early 2004.
Q. Do you recall having a view

on this prior to late 2003 or 2004?
A. I had a view on including reserves in our scorecard, expectation of reserves in our scorecard prior to the SEC implication or the -- or the reference that's made in this particular paragraph.
Q. And what was your view?
A. My view was that it was a very important parameter to have on the
0154
BRIAN J. WARD
scorecard of any operating company.
Q. Did you think that -- do you think that it ever encouraged inflation of reserves in your experience?
MR. CLARK: Objection; vagueness.
A. I personally don't believe that it would encourage inflation of reserves because to generate your increased resource base you need to meet your plan, and meeting your plan is what it's all about in terms of performance. If you can tick off that you've met your reserves expectation generation targets it also means that you've met your plan.
Q. What do you recall about the conversations that were had on this subject in the end of 2003/2004?
MR. CLARK: Objection; vagueness.
A. The conversations were around whether or not we internally feel that reserves is a good
0155
BRIAN J. WARD
performance indicator to have on the scorecards. It would be better given the circumstances that we remove it from the scorecards for a period of time.

Q. Do you think that there would be a difference between the effect of expectation reserves on a scorecard and proved reserves on a scorecard?
A. Expectation reserves are the lifeblood of your future growth in the company. Proved reserves are something which are bagged. When you talk about expectation reserves target you're talking about generating resources for future plans and future investment. So the two are very different.
Q. Do you think that proved reserves should be included on scorecards?
A. No, I don't think they should.
Q. I'm going to show you a
0156
BRIAN J. WARD
document which we'll mark as Exhibit number 6 for identification. It bears Bates numbers V 00300854 through 56.
(Ward Exhibit 6 for identification, Bates stamped V 00300854 through 56.)
Q. I'm not going to ask you anything about the people on the path forward, section 3 or section 4 or section 5. So if you want to just look at one, two and six.
A. Yes, I've read it.
Q. Do you recall the ExCom meeting that these -- that this document's describing?
A. I don't recall the meeting itself. I recall the contents.
Q. How regularly did ExCom meet in 2002 and 2003, if you can recall?
A. Once -- once a month and we sometimes would have a telephone meeting.

Q. And did you -- was it
mandatory to attend every meeting?
0157
BRIAN J. WARD
A. Yes. Unless impossible.
Q. You recall the contents of
what was discussed in the meeting? I'm
confused by your answer. You don't
recall the meeting itself, you recall
the contents. Does that mean you
recall the issues?
A. Yes.
Q. Okay. ROACE, is that return
on average capital employed?
A. Yes.
Q. What do you recall about the
-- what was being discussed with
respect to the EP business plan for
2002?
A. The EP business plan was not
acceptable to the CMD as it stood. It
didn't meet the targets that they had
set. We were asked to devise ways of
figuring out how we could adopt the
plan to meet the targets.
Q. What were the targets that
the business plan didn't meet?
A. The business could be
0158
BRIAN J. WARD
characterized by return on capital,
reserves replacement ratio, unit costs
and production levels, and these quite
often conflicted. And the discussion
was, for example, how would you meet
specific return on capital and at the
same time increase your production
without the investment.
So that was the type of
conflict situation that we were in and
that we discussed on a regular basis.
Q. Were there particular
targets that the CMD were not happy

with? For example, was there an issue with respect to the reserve replacement ratio that was in the business plan that was proposed by ExCom?
A. Yes, there was, and the CMD weren't happy with the result.
Q. What was presented by ExCom with respect to the reserve replacement ratio?
A. As mentioned several times, this was discussed on a frequent basis.
0159
BRIAN J. WARD
Reserves replacement ratios into the future of between 50 and 70 percent depending on which plan we adopted were frequent -- frequent -- were common. And these did not stack up against the competition in any way, shape or form.
Q. And what reserve replacement ratio was the CMD looking for, if you know?
A. I can't answer the question with respect to the CMD.
Q. Can you answer with respect to Walter van de Vijver?
A. With respect to the ExCom? Yes.
Q. Yes.
A. We were looking for a plan that would demonstrate an increasing reserves replacement ratio over the coming years.
Q. Was there a specific amount by which ExCom was looking at the reserve replacement ratio to increase by?
0160
BRIAN J. WARD
A. The train of events was the other way around. What were our options to generate more reserves, therefore, what could be the steps that

we could put into our plan.
Q. Was there any indication from Phil Watts as to what reserve replace -- reserve replacement ratio would be acceptable?
MS. LATIMER: Object to the form.
A. The reserve replacement ratio for any company target would be slightly over a hundred percent to allow for growth. Much more than that would mean you're investing without getting the return.
Q. Do you recall whether or not ExCom thought that that was a realistic expectation --
MR. CLARK: Objection.
Q. -- in 2002, a hundred percent reserve replacement ratio?
A. We were very clear that to
0161
BRIAN J. WARD
achieve a hundred percent plus reserve replacement ratio in 2002 was impossible. Other than acquisition and divestment type strategic approaches.
Q. Where it says in that second paragraph under business plan, the second sentence, "He then reviewed production growth, reserves replacement and unit operating cost - all of which are challenged, and showed the ExCom the performance figures required to close the gap between the plan and promised performance" --
A. Where are we looking at?
MR. CLARK: I think the witness and I are in a different place. You're in the second paragraph on the first page; is that correct?
MS. MARSHALL: Yes, maybe I misspoke.
Q. I'm looking at the second

sentence of the second paragraph of the
first page.
A. Okay.
0162
BRIAN J. WARD
Q. Do you know what performance
figures this is referring to?
A. It's referring to the
performance indicators described by the
four key indicators which we've
discussed several times.
Q. What, if any, action was
taken as a result of this conversation
regarding the business plan being
rejected by CMD?
A. The action was for us to
review our own plans and ensure that we
couldn't contribute further to the
overall EP plan than we had done. And
this was a common theme in these
discussions.
Q. What do you mean by to
ensure that you couldn't contribute
further to the overall EP plan?
A. What I mean by that is were
our individual regional plans tuned to
the group plan in the best way
possible.
Q. In the next page at the top
0163
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it says "EP - The road forward." It
says "Walter introduced the challenge
of the road forward for EP. He
described (i) setting the challenge to
take the risks necessary to 'get out of
the box.'" And get out of the box is
in quotation marks. What does the
phrase get out of the box mean to you?
A. It means that the four
parameters, reserves replacement ratio,
production growth, unit costs and
return on capital presented us with a

constrained environment. And since
there were four parameters we called it
a box. Since those parameters were
conflicting in almost every respect to
achieve one would mean degradation of
the other.
Q. So in order to get
production to grow you'd have to spend
more money?
A. And my ROACE would go down.
Q. And your what?
A. Return on capital would go
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down.
Q. And the only way to increase
the reserve replacement ratio would be
to increase production?
A. Increase --
Q. Costs and production?
A. And produce -- exploration,
increase exploration appraisal and so
on to increase our expectation and
reserves and then that would increase
our proved reserves.
Q. Okay. He then wrote, so
that was one, "setting the challenge to
take the risks necessary to 'get out of
the box,'" two, "making connection
between our past and our future." What
does that mean to you?
A. I don't recall what that
means.
Q. Okay. Three, "Integrating
and managing the changes," and four,
"Getting a sense of our own alignment.
He cautioned the way of thinking that
got us here is still alive today." Do
0165
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you know what way of thinking he was
referring to?
A. He was referring to more of

the same, do the same things as you did before, you get the same results, and we needed to think differently, we needed to be better aligned as a global business.
Q. In the end of the document under paragraph 6, "A winning story." It says that you presented an initial outline for the communications package. Do you recall what this communications package was for?
A. It was to be presented at a meeting of the ExCom and senior managers from the operating companies in a meeting, EP group leadership meeting. Sorry, that wasn't what it was called. It had another term. Anyway, it was the heads of all the EP operating companies and the EP ExCom.
Q. And what was the purpose of that meeting?
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A. The purpose of that meeting was to align all the senior people running our operating companies with our plan and what we required of them, made that clear.
Q. It says here in the second sort of dash, "While it was felt that numbers helped to make the story feel real and provide a tangible target, the use forward-looking goals to establish a 'stake in the ground' would be preferred to expressing it in terms of gaps." Can you explain what this --
A. This -- this was simply a matter of presentation. Rather than saying we fall short by X, we would say we wanted to achieve X by such and such a date. So we would set a goal.
Q. Okay. And do you know any reason why investor relations needed to

review this information? In the first line it says "The ExCom noted the need to have the information reviewed carefully by IR prior to any broad
0167
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distribution."
A. This was purely -- this was internal business with confidential information in there.
Q. So you don't have any understanding as to why that would have to occur?
A. It was -- we were just by this time fairly sensitive to the amount of effort that had gone into working with investors and invest -- analysts with our investor relations people and we wanted to make sure we weren't saying anything which would contradict that effort.
Q. I'm going to show you a document which we'll mark as Exhibit number 7. The first page is blank, but it's LON 01830079 through 81.
(Ward Exhibit 7 for identification, Bates stamped LON 01830079 through 81.)
Q. I just ask that you review the email exchange that begins at the
0168
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bottom of the first page.
A. Yes, I've read it.
Q. Do you recognize this exchange?
A. I recognize the content.
Q. Okay. And you've had the opportunity to view the -- review the document?
A. I've just read it.
Q. Okay. If you look to the bottom of the page there's an email

from Bob Turner to yourself dated
October 29th, 2002. The subject is
"Effect of min. standard on production
forecasting." Who is Bob Turner?
A. He was a member of the
technical and operational excellence
team.
Q. What was his role there?
A. He was the production
technology specialist.
Q. What were his
responsibilities in that role?
A. His role was, as with all
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the other disciplines, to come up with
a set of minimum standards of operation
for his discipline.
Q. What was the production
forecasting minimum standard?
A. It was a process which would
allow the operating companies to follow
a sequence of events to arrive at a
production forecast.
Q. Why was this a subject of
discussion at this time?
A. Because the issue around
production forecasting is that by its
very nature it's a skewed distribution,
and you are -- there's much bigger
chance in general that you will fall
short than that you will exceed.
Now if you add up the means
of those distributions you end up at a
forecast which you're more likely not
to achieve than to achieve, and we
needed to -- and that was borne out by
the struggle to achieve a planned
forecast of production.
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BRIAN J. WARD
What we were doing in T&OE
was saying, look, how -- how do we go

about this so that we get at least a 50
percent chance of being right.
Q. Was the idea of a minimum
standard on production forecasting a
new initiative or had there always been
a minimum standard on production
forecasting?
A. No, this was a new
initiative.
Q. And who initiated this
initiative?
A. I did.
Q. Did you have any discussions
with ExCom about the need for this
initiative?
A. Not that I recall.
Q. Do you recall ever talking
to Mr. van de Vijver about the need for
this initiative?
A. I recall talking to Mr. van
de Vijver about T&OE and where we would
be concentrating our efforts.
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Q. And was this one of the
areas that you --
A. And this was one of the
areas.
Q. I'm sorry, you need to let
me finish my questions so it's easier
for her.
A. I'm sorry.
Q. So this was one of the areas
that you would be concentrating on?
A. Yes.
Q. And did he express any view
on that?
A. Not that I recall.
Q. What did you understand Mr.
Turner to be warning you about in this
email?
A. He was basically reinforcing
what we already knew, that the way we

were adding up a myriad of separate production forecasts from various areas and adding them together to produce an overall group production forecast was subject to being over-optimistic.

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Q. When he wrote here, "I believe the production forecasting minimum standard could be a 9.0 on the Richter scale, it's becoming clear that there's a lot of hope (equal management adjustment and our current forecast round the group, no one seems to own the 3 percent growth target at the production end of the business. Upside potential is over-estimated and downside risk underplayed," what did you understand that to mean?

A. Could you be more explicit on which part you want me to comments on?

Q. Sure. When he says -- when he wrote there's a lot of, parentheses hope -- quotation mark hope, parentheses equal management adjustment and our current forecast round the group, what did you understand that to mean?

A. I understood that to mean a lack of realism by the people compiling

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the forecasts around the risks. If I were to give you an example --

Q. That would be great.

A. In the Gulf of Mexico if we have a bad hurricane season, the platforms are shut down and we lose a huge amount of production. It's an extremely difficult decision to make as head of an operating company or as a technical specialist to take a large

discount for the fact that you might have a hurricane coming and it might close your particular platform down.
On the other hand, on a statistical basis around the world if everybody ignores something that statistically is going to happen you end up with an over-optimistic forecast.
Q. And do you know what he meant by "no one seems to own the 3 percent growth target at the production end of the business"?
A. Yes. The 3 percent growth
0174
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target came from top down, was an ExCom target, and of course at the end of the day the people who have to produce that 3 percent are the people down running the fields and operating the fields and managing the fields. And they would look at you and say well, hey, I'm flat out, where am I going to get an extra 3 percent from. So that's the issue around lack of ownership. And so what we would have to do would be to convince them we have to work and see how we are going to do it.
Q. Was a minimum standard of production forecasting put into effect?
A. I don't know the answer to that question. I would assume so by now.
Q. Had it been put into effect before you left the company?
A. A large number of these minimum standards had been issued to the operating companies. They were -- including this one. They were being
0175
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worked. Feedback from the operating

companies was happening. It was the
process of finalizing and implementing
these final standards.
Q. Okay. Changing the subject,
do you recall in January of 2003 an
article that was written in I believe
an internal magazine called -- I don't
know what it was called, but that
discussed drawing on credit? Does that
mean anything to you?
A. I didn't hear you, I'm
sorry.
Q. A drawing on credit, an
article that appeared in I believe it
was an internal magazine?
A. No, I don't recall it.
Q. I'm going to show you two
documents to refresh your recollection.
We'll mark them at the same time, I'll
give them to you together because I
believe they should be read together.
MS. MARSHALL: The first one
I'll mark as Exhibit 8 which is RJW
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00190173, and the second one is V
0020922. And I think you should read
them in the order that we're marking
them.
(Ward Exhibit 8 for
identification, Bates stamped RJW
00190173.)
(Ward Exhibit 9 for
identification, Bates stamped V
0020922.)
Q. Have you had an opportunity
to read these documents?
A. I have, yes.
Q. Who is Jim Chapman?
A. He was my petroleum
engineering focal point on T&OE on the
technical and agreement -- sorry,
technical and operations excellence

team.
Q. Okay. And what was his -- what were his responsibilities in that position?
A. Basically his home discipline was production geology and
0177
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he was looking at the standards of reserves, production geology, reservoir engineering, that sort of stuff, and he -- his job was to develop minimum standards for these areas to support the overall objective of having the same minimum technical standards around the group.
Q. And in looking at the standards of reserves, was the standards of proved reserves included in that?
A. No.
Q. And when you say the standard of reserves, can you explain what you mean?
A. The issue around what -- what Jim was looking at was much more focused on the technology and technical process related to field development and field development in terms of how you arrive at booking reserves expectations and so on.
So he was not, if you like,
0178
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at that stage at any rate in the audit role of proved reserves booking compliance.
Q. Right. But would he be looking at field development plans and their related technical aspects to see if they could support commercial development for a particular field, for example?

MR. CLARK: Objection; asked and answered.
A. Would you like to rephrase, rephrase the question.
Q. Sure. When you say that he was more focused on the technology and technical process related to field development, the field development in terms of how you arrive at booking reserve expectations, can you explain what you mean by that?
MR. CLARK: Objection; misstates prior testimony.
MS. MARSHALL: I was reading his testimony.
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MR. CLARK: I don't think you read it right then.
Q. You can answer the question.
A. Okay. When asked to separate the issue of managing the business as a petroleum engineer from this issue of arbitrarily setting rules, compliance rules for booking proved reserves, the two have very little to do with each other. Jim's job was clearly to manage the standards by which development planning of fields and the process thereby was defined. In other words, how do you go through this process, how do you re- -- arrive at demonstrating your expectation of reserves, how do you then move forward into a development plan and so on. That's where his focus was.
His other focus was also to do with reserves, but again, much more on the practical side, were there other methodologies, other reservoir mechanisms that we could use such as
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water injection around the world which would enhance our expectation of reserves on a broad-brush basis because we felt that we were missing something in terms of application of best technology and best techniques, or may be missing something, and we wanted to review that.
That's Jim's role in T&OE.
Q. Do you recall the article that precipitated this email exchange that's in Exhibit 8 and 9?
A. In fact, I don't recall it.
Q. Do you recall any part of this exchange occurring?
A. A vague recollection in the back of my mind. It certainly didn't make an impact on me.
Q. In the email from Walter van de Vijver to Mr. Chapman that you're copied on, he says, "Knowing the sensitivity on our reserve base and formal reporting guidelines, how could you have contributed to such an article
0181
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in a magazine that also gets distributed externally?" Do you know what sensitivity he was referring to?
A. No.
Q. Do you know what magazine this is referring to?
A. No.
Q. In your email to Mr. van de Vijver that begins on the first page of Exhibit 9, the bottom of the first page, it says, "Jim being the head honcho for petroleum engineering recited the issues around the box, the key one being from his viewpoint reserve replacement." Is this -- do you know if this box that you're mentioning here is the same box we were

talking about before?
A. Yes.
Q. Okay. You wrote "It was absolutely clear he had no idea as to the sensitivities around disclosure, and to be fair to him, the latter has been building up significantly over the
0182
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last year." Do you have any recollection of what sensitivity you were referring to that was building up significantly over that last year?
A. Yes. It would have been the parameters surrounding the box, same four parameters.
Q. Do you recall if the disclosure had anything to do with the SEC disclosure?
A. I have no idea.
Q. Okay. Then if you look at John Darley's email to you, he said "In my view there are two issues. One is on disclosure of share-price sensitive data." Do you know what he meant by share-price sensitive data?
A. Any publication that went out into the outside world discussing key parameters looked at and -- by analysts and by which we were judged as a company was seen as share-price sensitive data.
Q. And your response to him --
0183
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well, he -- he wrote in the email "For your info, I have given instructions not to continue distribution of the magazine and to recover and destroy all distributed copies." You wrote in your response to Mr. Darley, "You said it John, technical content. I take your point, however. So much for openness,

by the way." Do you know what you meant by that statement, "so much for openness by the way"?
A. The group had been moving over time from being a very autocratic direct line communication in a rigid hierarchy to much more of an open discussion with much more fuzzy lines in terms of who you would talk to and who you could talk to and so on. And we recognized the hierarchical structure as being old-fashioned and contributing to the difficulties that we were finding ourselves in at the time this was written.
We promoted openness, but of
0184
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course the -- the issue around openness is how open is open.
Q. And this --
A. That's what I was referring to.
Q. Meaning perhaps this was too open?
A. Yes. I mean it needed more -- it should have had more thought before it went out, clearly.
Q. Do you recall having any conversations with Mr. Chapman about not the issue of the magazine article and that he wrote it and it was published, but the content?
A. No.
Q. Do you recall having any conversations with Mr. Chapman about the issue with respect to reserves that he was working on?
A. Yes.
Q. And when do you recall having those conversations?
A. I can't specify a time, but
0185

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it would have been over a period of time I'd have had those conversations.
Q. What do you recall about those conversations?
A. We were looking to see, looking at our resource base on a global basis, whether there were technologies that we could use, used by other -- by competitors or by other people successfully that would be applicable to our fields on a -- on a global scale to make a large difference to our recoverable reserves.
Q. Do you recall ever being privy to conversations about what -- whether there were certain types of field developments or technical procedures that the SEC did not support for reserves to be considered proved?
A. Could you rephrase the question.
Q. Sure. Did you ever recall whether there were any conversations with respect to certain technologies
0186
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used for the recovery and whether or not the SEC had any particular views with respect to any of those?
A. Yes, I do.
Q. Where do you recall those conversations taking place?
A. I don't recall where they took place.
Q. Were they at the ExCom level?
A. I don't recall where they took place, but such subjects would be discussed at the ExCom.
Q. What do you recall about those conversations?
A. The conversations were

around the fact that even though we considered our reserves booking processes to be conservative the SEC rules were far more constrictive in the sense that they would not allow 3D seismic results which we would use on a normal basis to be included, that they would not allow pressure data to

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estimate the column of oil or gas that you'd found to be used. This was the issue of lowest known hydrocarbons.

These sorts of things which were absolutely basic within, enshrined within our way of doing our technical business were not allowed by the SEC rulings.

Q. And was there a certain specific time period that you became aware of the SEC's views on those?

A. No. The -- the issue of noncompliance with SEC for myself personally was a two-year process.

Q. And those two years being?

A. 2002/2003.

Q. Were you surprised to learn the SEC's views on the 3D seismic results, for example?

A. I was very surprised because 3D seismic has been around a very long time and has proven its worth without any -- any discussion whatsoever in terms of how useful it was.

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Q. When you first learned that there were issues of noncompliance with the SEC, what was your reaction?

A. My reaction was I needed to see what the noncompliances were, were they significant, what did we need to do about them.

Q. Do you recall any specific
actions that you took in that regard?
A. The actions that I would
take -- I was taking were mainly
focused on SPDC. They were based on
and generated by the lack of
professional management of our
reservoirs in SPDC, not by the SEC.
The noncompliance issue with
the SEC was an issue that had to be
included in the overall bigger scheme
of things within the country.
Q. Was the reserve maturation
study in SPDC part of that process?
A. Yes, it was.
Q. And what was the genesis of
that study?
0189
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A. When we started off with the
critical issues process one of the
critical issues was reserves. The more
we dug into the reserves issue the more
problems we uncovered, and the more
resources we decided to put on to the
issue, and this was one of them.
Q. And what was the purpose of
the reserve maturation study?
A. Within the overall context I
can't answer that question.
Q. Was it something that Walter
van de Vijver wanted to be done?
A. I don't know. Certainly he
would have supported it.
Q. Why do you say that?
A. Because we had clear
indications that we needed to do more
work on our reserves and field
development planning in Nigeria, in
SPDC than was going on at the time, was
able to be put on it through internal
resources.
Q. And that was clear from when

0190
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you started as the CEO of Africa?
A. Yes, correct.
MR. CLARK: Caroline, if you want to stop at a convenient point for a quick break.
MS. MARSHALL: Now is fine.
MR. CLARK: Okay, let's just take five.
THE VIDEO OPERATOR: Going off the record, the time is 16:00.
(A recess was taken.)
THE VIDEO OPERATOR: Going back on the record, the time is 16:25.
MR. CLARK: Off the record.
(Discussion off the record.)
Q. Mr. Ward, you have in front of you a document that was previously marked at a prior deposition as Exhibit number 3 for identification at Mr. Kluesner's deposition. I don't expect that this is something that you've ever seen. I actually thought it might be helpful to show you to reference your recollection on the sequence of events
0191
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with respect to the reserve maturation study.
A. Yes.
Q. Okay. So if you want to take a moment to look through it. I don't believe that every phase has a reference that you may know about, every entry, but if you want to look through it --
A. Right.
Q. -- that would be helpful.
A. Okay.
Q. Have you had an opportunity to review this document?
A. Yes.

Q. Do you recall getting in touch with David Kluesner regarding the reserve maturation study in July of 2003?

A. Yes.

Q. What do you recall about your initial conversation or conversations with Mr. Ward? I'm sorry, with Mr. Kluesner, thank you.

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A. I reached the conclusion by this time that the studies that were being performed by the people in Nigeria were never going to be concluded in a satisfactory fashion. That was based on the fact that every time we had a summarization of the status of the work going on we got different figures and different conclusions. I needed to try to bring it to the head in Nigeria so that we had a document we could refer to because up until now it had proved -- it had escaped any -- my best efforts at least to come to a landing on where we were with respect to our overall reserves and project maturity position.

Dave Kluesner was a highly respected senior reservoir engineer in the group and I asked if he would help us out, go over to Nigeria, and specifically I wanted him to oversee the framing of the work that needed to be done. The complexity of the problem

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that we were faced with there, the technical complexity and the commercial complexity, if you like, with respect to meeting LNG demands required that we had to have a defined framework so that we always referred to the same

framework, otherwise, we were never going to come to a conclusion.
And I asked Dave Kluesner if he would help me out with this, get into the internals of what John Hoppe was doing, and feel comfortable with a framework that we could work with from then on.
Q. And when you say the internals of what John Hoppe was doing, what are you referring to?
A. I'm referring to what you would normally refer to as a terms of reference for a study, and quite clearly, from my experience as the year went on, the changes in figures and the changes in conclusions and approach was such that that framework was clearly
0194
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not there, wasn't embedded, and I guess the task was just too big.
Q. And do you recall what Mr. Kluesner was asked to look at?
A. Well, I was more interested in him overseeing the structure of the work that needed to be done and how the framework would be set up, so that we had a consistent review point.
When Dave got there, it was quite clear that they -- they needed him to help in the more basic stuff, the more -- and from where I stood, I would say that he got too quickly into the detail with John Hoppe rather than attacking this framework, although he did do that as well.
Q. And the detail was the detail of the maturity --
A. Maturity of the projects and therefore the maturity of the reserves bookings.
Q. So he took it on a field-by-

field basis?
0195
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A. Yes. Well, a project-by-
project basis.
Q. Project-by-project basis?
A. Yes.
Q. To try to determine the
maturity of the project?
A. Yes, yes.
Q. And also to try to match
that up with the reserves that had been
booked?
A. That's correct.
Q. And was it anticipated that
there was going to be a gap?
A. Yes.
Q. And did he in fact find
there to be a gap?
A. He did, yes.
Q. And was it initially
expected that part of his project would
be aimed at determining how best to
fill that gap with -- by developing
or --
A. No.
Q. -- or maturing certain
0196
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projects?
A. That was not his prime aim.
His prime aim was to develop a
methodology or a framework by which we
could, A, establish the true position
of our reserves if there was such a
thing, and B, provide a way ahead in
terms of structure for the study.
Q. And were Mark Corner and
Phil Davis involved in the project?
A. Yes.
Q. And what was their
involvement?
A. Phil was my normal contact

route to what was going on, and Mark Corner was the technical director in SPDC and therefore had accountability over the -- overseeing this particular issue.
Q. If you look on the second page the entry on November 12th, 2003, there's a reference to a meeting with Mark Corner and John Hoppe with Phil Davis and Tom van Leenen on the phone
0197
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in The Hague. Who's Tom van Leenen?
A. Tom van Leenen was the opposite number to Phil Davis on the engineering side.
Q. Okay.
A. So not the petroleum engineering side which was Phil Davis, but on the engineering side, in EPG.
Q. It says "Finished the teleconference with Brian Ward on the phone where he stressed how important it was to finish study and to make sure we had it right. Questions about what to do, de-booking or other as a result of the immaturity and shortfall were briefly discussed." Do you recall that conversation?
A. I don't recall that conversation.
Q. Do you recall going to Nigeria for a meeting on November 18th, or was that a meeting that you attended by telephone?
A. I don't recall this meeting.
0198
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Q. Do you recall traveling to Nigeria in the fall of 2003?
A. I traveled to Nigeria on a fairly regular basis.
Q. So it's conceivable you were

at the meeting, you just have no particular recollection?
A. I don't have a recollection of this meeting.
Q. Do you recall learning about the magnitude of the shortfall?
A. I learned -- at this meeting?
Q. At any point in time.
A. Yes, I learned about it from Phil Davis.
Q. Do you recall when that was?
A. Certainly towards the end of 2003.
Q. Could it have been before this meeting, or you just have no recollection?
A. I don't recall the chronology.
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Q. Do you recall what your reaction was when you learned the magnitude of the shortfall?
A. My answer to your question is my reaction to the magnitude of the shortfall after I was aware of the consequences of the deviations from the SEC rulings, which was late in the year, was to de-book them in total. There were all sorts of categories. What the people had done, what the technical staff had done was divided these reserves up into reserves that were too far into the distance to include reserves which needed more maturity work done on them, reserves which this, reserves which that. And it was clear to me at a certain point in time towards the end of 2003 that there was simply no way this process of studying throughout 2000 and 2003 had any hope of coming to a conclusion at

that time.
I was by that time aware,
0200
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certainly post-mid-November 2003 I was aware of the very considerable consequences foreseen by our board and my reaction was to de-book them regardless and then start work on fixing the problem with the reserves de-booked.
Q. Was there any disagreement within the company about whether or not your view that all of the reserves should -- all of those reserves in the study should be de-booked was correct?
MR. CLARK: Objection. Do you have a time frame?
Q. When you came to that conclusion were there other people who were expressing a different view?
A. Not to my knowledge.
Q. Around the same time?
A. Not to my knowledge. The -- at that time we'd passed this rubicon the awareness of the consequences of deviations from the SEC rulings had become so clear that I think
0201
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everybody's reaction was, look, we don't have an alternative, we have no time left, we can't -- we can't fix this, de-book. However, that's -- sorry, that was my opinion, that's the feeling I got from my colleagues.
Q. And you didn't hear a different opinion expressed --
A. I didn't hear a different opinion.
Q. -- at that time?
Do you recall a time where you did hear a different opinion

expressed?
A. The process beyond about mid-November 2003 excluded most of the ExCom. In fact, it probably was a little earlier than that, where Walter formed a small group that worked absolutely full time on this issue. It included the group reserves auditors, but also the group auditor, these sorts of people. And I was not involved in any discussions from that point in time

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until the disclosure on the 9th of January 2004.
Q. Because you were not included on that team or because you were?
A. Yes. Because they had to have a small team. The -- my contribution to that team was the input from Dave Kluesner's work and where I derived that in a final -- with my people, but they took that and then write we now have to decide how to work through with this.
Q. Do you ever recall prior to November of 2003 any debate within ExCom about the need to de-book reserves as a result of the SEC guide -- the SEC rule?
A. Yes, I do.
Q. When -- do you recall debates occurring on more than one occasion?
A. Yes.
Q. When do you first recall

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that debate beginning?
A. I can't name a date.
Q. What year was it?
A. Certainly we would be

discussing it at the beginning of 2003.
Q. Do you recall whether you ever took a position in 2003 about whether or not any reserves needed to be de-booked because of the SEC -- compliance or lack of compliance with the SEC rule?
A. The issue was very simply that if we were unable to demonstrate compliance or offsets for booked reserves, we would have to de-book. However, the complexity of the issue that I've referred to before meant that the document that was to arrive on my desk finalizing and concluding the position that we were in never actually arrived.
Q. So is it your view that the de-booking needed to happen because no answer could be found?
0204
BRIAN J. WARD
A. We were unable to arrive at what I would have considered to be a defensible document not to de-book.
Q. Was there a time frame -- let me ask it this way. Going back to 2000 -- the beginning of 2003, you testified that ExCom would certainly be discussing de-booking at the beginning of 2003. At that time was there a time frame discussed by which there needed to be the ability to defend the bookings or else they would have to be de-booked?
A. Yes, by the end of the year.
Q. And who -- where did the deadline of the end of the year come from?
A. That would be the deadline for our disclosure on reserves, so we would have had to have booked those reserves by that time, or de-booked

them by that time to include them in
the documentation in the spring.
Q. Was there ever any
0205
BRIAN J. WARD
discussion about whether there were
requirements for disclosures of
previously booked proved reserves that
had been determined to be no longer
meeting the criteria of proved reserves
prior to the end of the year?
MR. CLARK: Objection to the
form.
A. I recall discussions in
ExCom about certain reserves being at
risk of de-booking.
Q. Do you recall which reserves
those were?
A. Nigeria was one, Kashagan,
Gorgon. I can't remember others. I
think there were smaller ones around
the patch.
Q. What do you recall about
those discussions about those reserves
that were at risk of de-booking?
MR. CLARK: Objection to
form.
A. I recall discussions around
what flexibility we had with respect to
0206
BRIAN J. WARD
each of these bookings at risk to do
something about them, and I wasn't
involved in the other fields, but in
terms of SPDC, I relayed the fact that
we were working the issue as hard as we
could and hoped to come up with an
answer before year end.
Q. In the beginning of 2003 did
you suspect that there was going to be
the need to de-book at least some
reserves for SPDC at the end of 2003?
MR. CLARK: Objection to

form.
A. It was certainly on the cards.
Q. Did you have any specific communications with Judith Boynton while you were the CEO of Africa?
A. Could you tell me what you mean by specific communications?
Q. Do you recall any particular communications that you had with her while you were the CEO of Africa?
A. Other than greetings, no.
0207
BRIAN J. WARD
Q. After you became the CEO of Africa, do you recall ever having any specific communications with Mr. Watts?
A. I don't recall any discussions with Mr. Watts about a particular subject more than perhaps presenting in the boardroom. My -- my line was to Walter.
Q. Did you have any interaction with any representatives from KPMG?
A. No.
Q. Did you have any interactions with anyone from PwC? Thank you.
A. No.
MR. FERRARA: We know it's late.
MS. MARSHALL: Yes, that's a good sign I'm getting tired.
Q. Do you have any knowledge of the SEPTAR organization within Shell?
A. Other than to say it was the technical body based in Rijswijk, which had been there for many, many years.
0208
BRIAN J. WARD
Q. Did SEPTAR have anything to do with TOE?
A. There was clearly an overlap

in terms of technical disciplines if
people are doing research on production
geology or developing methodologies on
production geology, and Jim Chapman is
setting minimum standards for
production geology in T&OE, then quite
clearly there is a connection between
the two.
Q. Would the minimum standards
that he would have been working on had
been -- would they -- they would have
been applied globally?
A. Yes.
Q. Do you ever have any
occasion during your employment at
Shell to travel to the United States?
A. Yes.
Q. For what purpose?
A. In the eighties I ran a
contract in Alabama, a computing
contract and I would visit there. And
0209
BRIAN J. WARD
in the last decade I've been over to
Houston for what they call group
leadership meetings, where the
leadership of the Shell Group meets
once a year.
Q. What type of computing
contract was this?
A. I was developing an
interactive graphics system for
evaluating petrophysics.
Q. Who would attend the group
leadership meetings in the United
States?
A. All senior staff, top senior
staff from operating companies around
the world except those on the -- on the
not accepted list from the US.
Q. Meaning the United States
wouldn't let them in?
A. No, it just we didn't -- we

didn't include them.
Q. For political reasons or
some other reason?
A. You have a list of countries
0210
BRIAN J. WARD
in the world with which you do not do
business.
Q. With which -- meaning --
A. US.
Q. You meaning the US?
A. Yes.
Q. Why, if you know, were the
meetings held in the US?
A. Sorry?
Q. Do you know why the meetings
were held in the US?
A. One was held in the US and
alternately in The Hague.
Q. Were there specific issues
that were addressed at each of those
meetings?
A. The -- the objective of
those meetings was to raise awareness
of a very large group of senior
management from the group in terms of
the objectives of the group, the
rationale behind the objectives, to
explain what the future looked like, to
explain any major reorganization or
0211
BRIAN J. WARD
change in strategic thinking from the
CMD and so on.
Q. Do you recall the last
meeting you attended in the United
States? Well, the last of those types
of meetings that you attended in the
United States?
A. Well they were pretty much
similar.
MR. CLARK: Were you asking
him the date of it?

Q. Yes, I mean was it in 2003, 2004, 2002?
A. There would have been one in 2003, yes.
Q. In the United States?
A. Yes -- well, yeah.
Q. Was it every other year in Rijswijk?
A. Every other year it was in Rijswijk or in -- or in Houston.
Q. And starting with what position did you hold did you begin to attend those yearly meetings?
0212
BRIAN J. WARD
A. When I was -- when I was production director in Aberdeen, early nineties.
Q. So starting with the early nineties throughout your tenure you attended those meetings?
A. Yes.
Q. And who led those meetings?
A. The group managing director.
Q. How long did the meetings last?
A. Used to be a day with your own function, E&P, and then a day with everybody together, E&P, chemicals, downstream.
Q. Would production forecasts and reserve replacement ratios be among the things that would be discussed?
A. Presented rather than discussed.
Q. Meaning there was too many people to have any kind of discussion?
A. Yes, correct.
Q. So there would be
0213
BRIAN J. WARD
presentations on those issues?
A. Yes.

Q. Do you ever recall presentations on the reserve guidelines?
A. No.
Q. Did you ever attend any ExCom meetings in the United States?
A. No. Other than the -- the EP meeting which preceded the group leadership meeting which I just referred to. So that was a -- what we called an extended ExCom which was the ExCom plus the MDs from the various EP operating companies.
Q. So you would have one of those meetings each time?
A. Each time, yes.
Q. Okay. And who would set the agenda for those meetings?
A. The CMD.
Q. Do you recall whether at any of those meetings there were any presentations by the centers for excellence? Would they be involved in
0214
BRIAN J. WARD
those meetings?
A. Yes.
Q. Would SDS be involved in those meetings? Were they involved in any of those meetings that you can recall?
A. Not that I can recall, no. Oh, correction, let me -- sorry, can I come back on that. I recall that SDS had a floor show in the hall where they demonstrated their expertise and results in the Gulf of Mexico.
Q. Okay. I'm going to show you one document and then we're not going to be here too much longer.
MS. MARSHALL: We'll mark as Exhibit number 10 for identification. It's Bates V 00160446 through 450.
(Ward Exhibit 10 for

identification, Bates stamped V
00160446 through 450.)
Q. I'm not going to ask you any details about the attachment. I'm going to ask you more about the email,

0215

BRIAN J. WARD

so I just want to -- you know, to the extent that you recognize the document I wouldn't suggest you have to read it in a lot of detail.
A. Okay.
Q. Do you recognize this email exchange and the attachment which is titled "Script for Walter on proved reserves position"?
A. I recognize the email content. I don't -- I don't specifically recall reading the document attached, but I do recognize quite a lot that's in there.
Q. Do you recall the circumstances surrounding this exchange?
A. We were at the stage by now where Walter had formed a group of people to manage the reserves issue. I was on the outside and I was asked to comment on a document, and that's what I've done here.
Q. Did the -- if you look at your email, you say "The amount of

0216

BRIAN J. WARD

reserves to be firmed up in Nigeria during 2004, estimated 42 man years effort, is substantial. The 42 man years attacks 580 mmbbls reserves." Are those figures that you got from the reserve maturation study, if you can recall?
A. Those figures came out of the final discussions with SPDC after the reserves maturation study, yes.

Q. You then wrote, "Of that 580 it is already estimated that 140 mmbbls will be so far in the future it won't qualify. They are then proposing a discount factor of 80 percent to the remainder," there's a calculation which gets you to 342. Do you know who you meant by the they? Who was proposing this?
A. I don't know who proposed that.
Q. Then you wrote, "Thus we can sort of put our hand on our heart technically and add back 352 mmbbls."
0217
BRIAN J. WARD
What was your view on adding that back?
A. Well, what I'm saying is that there is uncertainty surrounding the 440. If we allow for that uncertainty by discounting it by an arbitrary figure, that would either completely or go part way to allowing for that uncertainty.
Q. But was it your view that --
A. I was offering an option here to Frank. My view was that we should de-book.
Q. And not do the discount?
A. And not even start to play around with these figures anymore.
Q. Did you have any conversations yourself with Mr. van de Vijver about what you thought should be done with respect to the de-booking of reserves in SPDC at the end of 2003?
A. No. This was -- this was my input to the team at the end of the day.
Q. So did you ever speak with
0218
BRIAN J. WARD
him about it?

A. Whilst he was working in that team I didn't discuss it with him as far as I can recall.
Q. Did you ever discuss it with him prior to him working in that team?
A. We discussed the issue of de-booking reserves during 2003 on a fairly regular basis in Nigeria and he would ask for updates as to where we were with the studies, but the problem with the studies, as I've already outlined, was they were never ending and they never really managed to get a handle on the totality of the problem.
Q. Did he ever express any frustration to you about the fact that the studies were never ending and weren't providing a clear way forward?
A. He -- he was well aware of my level of frustration and therefore, he, I guess he didn't see much point in expressing his level of frustration on top of mine.
0219

Q. Did you ever have any discussions with him after the de-booking was done regarding the circumstances surrounding the de-booking?
A. No.
MS. MARSHALL: We can take a little break and I'll check to see if I have anything more.
THE VIDEO OPERATOR: Going off the record, the time is 17:09.
(A recess was taken.)
THE VIDEO OPERATOR: Back on the record. Here marks the beginning of tape number 4, volume 1, in the video deposition of Brian Ward. The time is 17:19.
Q. Mr. Ward, earlier, just recently actually you were --

THE VIDEO OPERATOR: Sorry,
your microphone.
Q. A few minutes ago we were
talking about the beginning of 2003 and
conversations within ExCom regarding
the possibility of de-booking reserves.
0220
BRIAN J. WARD
Do you know whether or not there was
any awareness at the CMD level that
such conversations were occurring at
ExCom?
A. I'm not aware.
MS. MARSHALL: I have no
further questions.
MR. CLARK: I just have a
couple.
EXAMINATION BY MR. CLARK:
Q. First of all, Mr. Ward, a
few minutes ago you used the phrase "on
the cards." Can you tell us what on
the cards means or what you meant by
it?
A. On the cards in my
terminology means it's likely to
happen.
Q. Quite some time ago you
answered some questions about reserves
and proved reserves on scorecards. Do
you recall that?
A. I do.
Q. Do you recall stating that
0221
BRIAN J. WARD
you did not think proved reserves
should be on scorecards?
A. I do.
Q. Can you tell us why you do
not think proved reserves should be on
scorecards?
A. Scorecards were all about
achieving your objective proved
reserves on something which are done

and dusted, they don't fit with a scorecard.
Q. Does your answer that proved reserves should not be on scorecards have anything to do with SEC rules?
A. None whatsoever.
Q. Finally, earlier this afternoon you said that the issue of noncompliance with the SEC for yourself personally was a two-year process. Can you tell us what you meant by that?
A. I meant that it was a learning process for myself. My priorities were, at the beginning of those two years were far more related

0222

BRIAN J. WARD

to getting SPDC up to a standard of operation which was acceptable and comments regarding the SEC, divergence from SEC rulings were heard, but I heard them in the context of we were a conservative company anyway with our rulings, so it was I guess I was feeling it was more of an administrative issue rather than anything else.

As the -- as the time went on -- there was one other -- there was one other happening which I think is relevant to mention. At a certain stage Frank Coopman, sometime I guess second half of 2003, but I'm not sure, made a statement that they were in letter discussion with the SEC which sort of confirmed to me even at that stage that we still were discussing these issues with the SEC and there was no -- that this was something that was being handled overall. So it -- I was very late to the game, but I guess that

0223

BRIAN J. WARD

happened to a lot of people as well.
So the learning curve was a long process for me and it wasn't until very late in 2003 that I recognized the magnitude of the seriousness of the issues we were facing with respect to these divergences in booking criteria.

MR. CLARK: I have no further questions. Anybody else?

EXAMINATION BY MS. MARSHALL:

Q. I just wanted to ask you a couple of questions about one of your last statements. You said that proved reserves were done and dusted?
A. Mm-hmm.
Q. What do you mean by that?
A. Proved reserves are established and in the ground so when you set out a plan of action what you're going after is increasing your resource base, that's what it's all about, in order for you to enable you as a company to grow in the following years. If you don't have that

0224

BRIAN J. WARD

increased resource base you can't grow.
So you could mathematically, I suppose, convert expectation of reserves into proved reserves and then use that on a scorecard, but it really didn't make any sense whatsoever.
Q. Wasn't there a time in Oman, for example, that expectation reserves and proved reserves were equated to a certain extent?
A. I don't recall specifics for Oman. There is a -- a ratio of proven to expectation reserves which doesn't necessarily mean anything, but it is a guideline used in the industry and if it's -- if it deviates from the sort of norm it might be a signal that you

should look at the two figures.
Q. If proved reserves are done and dusted, why was it that Shell had to recategorize so many reserves from proved reserves?
MR. CLARK: Objection; argumentative.
0225
BRIAN J. WARD
Q. You can answer the question.
MR. CLARK: If you can.
A. Well, I guess that's what this whole deposition is about. We had to recategorize it because we needed to, when we adjusted one parameter in the total equation, you had to adjust other parameters as well. So if you took reserves from your proved reserves category it had to go into expectation or scope for recovery as we called it. So there was a knock-on domino effect in changing all your reserves figures.
The total resource volume you -- the total resource volumes are the same. If you change one of them, the others change.
Q. Wasn't there an effort within the different operating units of Shell to move reserves from the estimated category to the proved category?
MR. CLARK: Objection to form.
0226
BRIAN J. WARD
A. Not that I'm aware of.
Q. Is there money to be made on estimated reserves?
A. When you say estimated reserves, can you clarify.
Q. When you're -- you were talking about -- or expectation reserves.

A. Okay.
Q. Is there money to be made on expectation reserves?
A. Expectation reserves is the basis of your business.
Q. And how is -- how are expectation reserves turned into revenue coming in?
A. Expectation reserves are not turned into revenue. Production is turned into revenue.
Q. And when reserves are being produced are they then considered proved reserves?
A. De facto, yes, if they're being produced.
0227
BRIAN J. WARD
Q. And so in order to be produced -- in order to get revenue from reserves, they must then in fact be proved, correct?
A. Yes.
MR. CLARK: Objection to the illogic of the question.
MS. MARSHALL: Well, he answered yes. I have no more questions.
MR. CLARK: Did you answer yes?
THE WITNESS: I didn't think I answered yes.
MS. MARSHALL: I did and so did the reporter.
MR. CLARK: Then I'll follow up.
EXAMINATION BY MR. CLARK:
Q. Did you mean to answer yes to that question?
A. Well, if you want me to answer that I need to hear the question again.
0228

BRIAN J. WARD
MS. MARSHALL: "In order to be produced, in order to get revenues from reserves, then they must in fact be proved, correct?"
THE WITNESS: In order to get revenue from reserves you have to produce the reserves and if you produce a reserve de facto they are proved reserves.
MS. MARSHALL: I have no more questions.
MR. CLARK: I do.
EXAMINATION BY MR. CLARK:
Q. Are you aware of any rule, regulation or guideline that requires reserves to be proved before they're produced?
A. No.
Q. Is your answer based on the fact that after a reserve is produced, whether expectation or proved, it will be considered proved?
A. Absolutely.
Q. Are you aware of any
0229
BRIAN J. WARD
circumstances in which operating companies such as PDO Oman neglected to convert over or subtract their production from proved reserves?
A. No.
MR. CLARK: No further questions.
THE VIDEO OPERATOR: Here marks the end of videotape number 4, volume 1 in the video deposition of Brian Ward. Going off the record, the time is 17:31.
(Time noted: 5:31 p.m.)

____

BRIAN J. WARD

Subscribed and sworn to before me
this _____ day of _________, 2007.

____

0230

STATE OF NEW YORK) Pg__of__Pgs
ss:
COUNTY OF NEW YORK)
I wish to make the following changes,
for the following reasons:
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0231

C E R T I F I C A T E
STATE OF NEW YORK)
: ss.
COUNTY OF NEW YORK)
I, GAIL F. SCHORR, a Certified Shorthand Reporter, Certified Realtime Reporter and Notary Public within and for

the State of New York, do hereby certify:

That BRIAN J. WARD, the witness whose deposition is hereinbefore set forth, was duly sworn by me and that such deposition is a true record of the testimony given by the witness.

I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of ___________, 2007.

____
GAIL F. SCHORR, C.S.R., C.R.R.

0232

E X H I B I T S

DESCRIPTION	PAGE	LINE
(Ward Exhibit 1 for identification, Bates stamped LON 00010726 through 728.)	66	22
(Ward Exhibit 2 for identification, Bates stamped V 00120472 through 485.)	117	11
(Ward Exhibit 3 for identification, Bates stamped LON 01830060 through 64.)	129	16
(Ward Exhibit 4 for identification, Bates stamped V 00230705 through 721.)	136	8
(Ward Exhibit 5 for identification, ID number 101328316.)	146	4

0233

(Ward Exhibit 6 for	156	5

identification, Bates
stamped V 00300854 through
56.)
(Ward Exhibit 7 for 167 21
identification, Bates
stamped LON 01830079 through
81.)
(Ward Exhibit 8 for 176 6
identification, Bates
stamped RJW 00190173.)
(Ward Exhibit 9 for 176 9
identification, Bates
stamped V 0020922.)
(Ward Exhibit 10 for 214 20
identification, Bates
stamped V 00160446 through
450.)

Busaidi, Hilal H.M.

From:	Kennett, Chris / OQP
To:	KERR, B. / EPT-AM, SIEP
Cc:	O-Neill, Niel N. / OBP; Busaidi, Hilal H.M. / CLM3
Subject:	RE: Reserves and Financial Reporting
Date:	14 September 1998 11:47

Brad,
I am working on a reply to your email and will get back to you shortly.
I have not been able to attend to this earlier due to the leaves/absenses on course of various key staff

Chris

From: KERR, B. / EPT-AM, SIEP
To: KENNETT, CHRIS / OQP
Subject: RE: Reserves and Financial Reporting
Date: 01 September 1998 15:49

Chris,

I would like to clarify the basis for the 252 mbo increase in proved developed reserves discussed in your note. The note said this was the difference between the method previously agreed with an external auditor and the "SPE proven developed definition". The SPE article is fairly broad and discusses a number of methods, although it does clearly differentiate between them.

1. Probablistic - use at least the P90 value
2. Scenario deterministic - a deterministic estimate with a "high degree of confidence"
3. "Proved area" deterministic - a deterministic estimate within the "proved area"

What method is your new estimate based on?
Does the use of the expectation estimate for proved developed reserves also impact proved reserves? You will see from the discussion below that this is often the case for mature fields.

we used developed exp.

The revised guidelines are essentially done (they await auditor's endorsement which is planned for later this week). A draft is attached. The guidelines allow the use of probablistic and scenario deterministic methods for all cases. The "proved area" deterministic method is only allowed for mature fields where most of the reserves have been developed. In these cases, if you use the expectation estimate for proved developed reserves and the low estimate (P85) for proved reserves, the resulting value for proved undeveloped reserves (calculated by difference) is an unrealistically low (or negative) value. Therefore, in these cases, you should either use the "proved area" deterministic method, or not calculate proved undeveloped reserves by difference (ie. calculate the proved undeveloped reserves (low estimate) and proved developed reserves (expectation estimate) separately and then add them together to derive total proved reserves).

we do not want to touch the proven figures methodology

This may be hitting you cold since PDO has not had to do these calculations in the past. Please give me a call if you have any questions.

000730

FOIA Confidential
Treatment Requested

LON00010726

EXHIBIT 1
Ward
1/10/07
GAIL F. SCHORR, C.S.R., C.R.R.

Thanks for your help.

Best regards,
Brad Kerr

<<File Attachment: SIEP98-1.DOC>>

| From: WATSON, C.H.E. / EPM, SEPI, OPENMAIL
| To: BOSTOCK, D. / EPT-AM, SIEP RIJSWIJK, OPENMAIL; KERR, B. / EPT-AM, SIEP, OPENMAIL
| ; ELAM, P.F. / EPB-P, SEPIV, OPENMAIL
| Cc: VAUGHAN, A.B. / EPM, SEPI, OPENMAIL
| Subject: FW: Reserves and Financial Reporting
| Date: 04 August 1998 08:14
|
| Gents
| herewith the PDO response: please would one of you
| a) confirm that the response is full and satisfactory
| b) let me know if this is 'good news from a group reporting point of view'
|
| many thx
|
| Charles
| ----------
| From: Ward, Brian B.J. / MD, PDO MUSCAT, OPENMAIL
| To: WATSON, C.H.E. / EPM, SEPI, OPENMAIL; ELAM, P.F. / EPB-P, SEPIV, OPENMAIL
| Subject: FW: Reserves and Financial Reporting
| Date: 04 August 1998 07:01
|
|
|
| We have now discussed in house the impact of the changes in reserve
| reporting guidelines as proposed by the SIEP Value Creation team on
| PDO's 1/1/99 reserves reporting.The conclusions are as follows:
|
| 1) Proven Developed Reserves
| The proposal is to follow the SPE definitions regarding proven
| developed reserves (i.e. essentially by equating proven and expectation
| developed reserves). In the case of PDO, proven developed reserves do
| not currently feature in the ARPR, and a simple bottom line number (
| based on an algorithm agreed some years ago with the external auditor)
| is reported to the external shareholders at the end of the year. If PDO
| were to adopt the SPE proven developed definition to arrive at this
| bottom line number, this would
|
| * increase the reported PDO proven developed reserves from 1430 million
| bbl to 2172 million bbl, representing an increase in Shell share of 252
| million bbl.
|
| * this change would have no impact on PDO financial reporting (income,
| tax, depreciation etc)
|
| 2) Proven reserves
| PDO currently report total proven reserves to external shareholders
| based on arithmetic addition of the individual field proven reserves.
| Based on PDO's wide selection of different field types and
| configurations, it could be argued that individual field reserves are
| independent, which would support the concept of probabilistic addition
| rather than simple arithmetic addition of field proven reserves

| (arithmetic addition will be maintained at a reservoir level within
| individual fields). This would increase the PDO total proven reserves
| by 1399 million bbl (Shell share of increase 476 million bbl) resulting
| in a proven/ expectation ratio of 86.5%. Such a change would have no
| impact on PDO financial reporting, and would be catered for in the ARPR
| by an additional table showing the comparison of arithmetic and
| probabilistic addition at the field level.
|
| The following table summarises the impact of the proposed changes
|
|
|
|
|
| Although the above changes will not impact on Government, we still need
| as a matter of courtesy to explain these changes in external reserves
| reporting to the Ministry of Oil and Gas. We also understand that SIEP
| are discussing the proposed changes in reserves reporting guidelines
| with the external auditors.
|
| Brian Ward
|
|
|
| <<OLE Object: Microsoft Excel 5.0 Worksheet>>
|

Unknown

From: Brass, Lorin L.L.
Sent: 20 February 2002 07:02
To: Gardy, D.; Cook, Linda Z.; Megat, Zaharuddin Z.; Warren, Tim T.; Sprague, Robert M.; WARD, BRIAN B.J.; Darley, John J.; Bichsel, Matthias M.; Dubnicki, Carol C.; VanDeVijver, Walter W.
Subject: Note For Information - Reserves - CMD - February 2002

CMD_NFI_FINAL1_RRR.ZIP   CMD note tachments final.ZIP

Excom,

The following was the NFI to CMD regarding our Reserves situation. I should've put in Excom preread for last Monday but forgot. At the end are some of the "action items" identified, but clearly there are more.

EXHIBIT
Ward 2
1/10/07
GAIL F. SCHORR, C.S.R., C.R.R.

DB 07635

Note For Information
CMD 11th 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 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.

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.

Table 1 : Summary of 2001 Reserves/Resources Replacement

proved RRR	Production	1 year 2001				3 year 1999-2001			
		Incl A&D		Excl A&D		Incl A&D		Excl A&D	
		Incl AOSP	Excl AOSP	Incl AOSP	Excl AOSP	Incl AOSP	Excl AOSP	Incl AOSP	Excl AOSP
Oil/NGL	0.81	65%	65%	58%	58%	102%	77%	130%	106%
Gas	0.57	86%	86%	42%	42%	50%	50%	55%	55%
Total BOE	1.38	74%	74%	52%	52%	81%	67%	101%	86%

Production	2002 Target	
	Incl A&D	Excl A&D
0.83	91%	49%
0.58	113%	69%
1.41	100%	57%

Additions bln boe	Production	1 year 2001				3 year 1999-2001			
		Incl A&D		Excl A&D		Incl A&D		Excl A&D	
		Incl AOSP	Excl AOSP	Incl AOSP	Excl AOSP	Incl AOSP	Excl AOSP	Incl AOSP	Excl AOSP
Oil/NGL	0.81	0.53	0.53	0.47	0.47	0.82	0.63	1.05	0.86
Gas	0.57	0.49	0.49	0.24	0.24	0.28	0.28	0.31	0.31
Total BOE	1.38	1.02	1.02	0.72	0.72	1.12	0.92	1.39	1.18

Production	2002 Target	
	Incl A&D	Excl A&D
0.83	0.76	0.41
0.58	0.66	0.40
1.41	1.42	0.81

Resources (bln boe)	2000	2001	Delta
SFR (com discovered)	14.1	16.7	
Expectation (incl proved)	32.6	32.7	
Total	46.7	49.4	2.74
less Urdaneta West (license)			1.28
Resources added (net)			1.46
Production			1.38
Resources added (gross)			2.84

Reserves (bln boe)		Proved		Developed	
Balance 31.12.2000			20.1		9.0
Additions	Extensions	0.36			
	Revisions	0.35		0.17	
	A&D	0.31			
	Transfer to Dev			1.02	
			1.02		1.19
Production			-1.38		-1.38
Balance 31.12.2001			19.7		8.8

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Table 2: Total Resource Base as at 31.12.01

bln 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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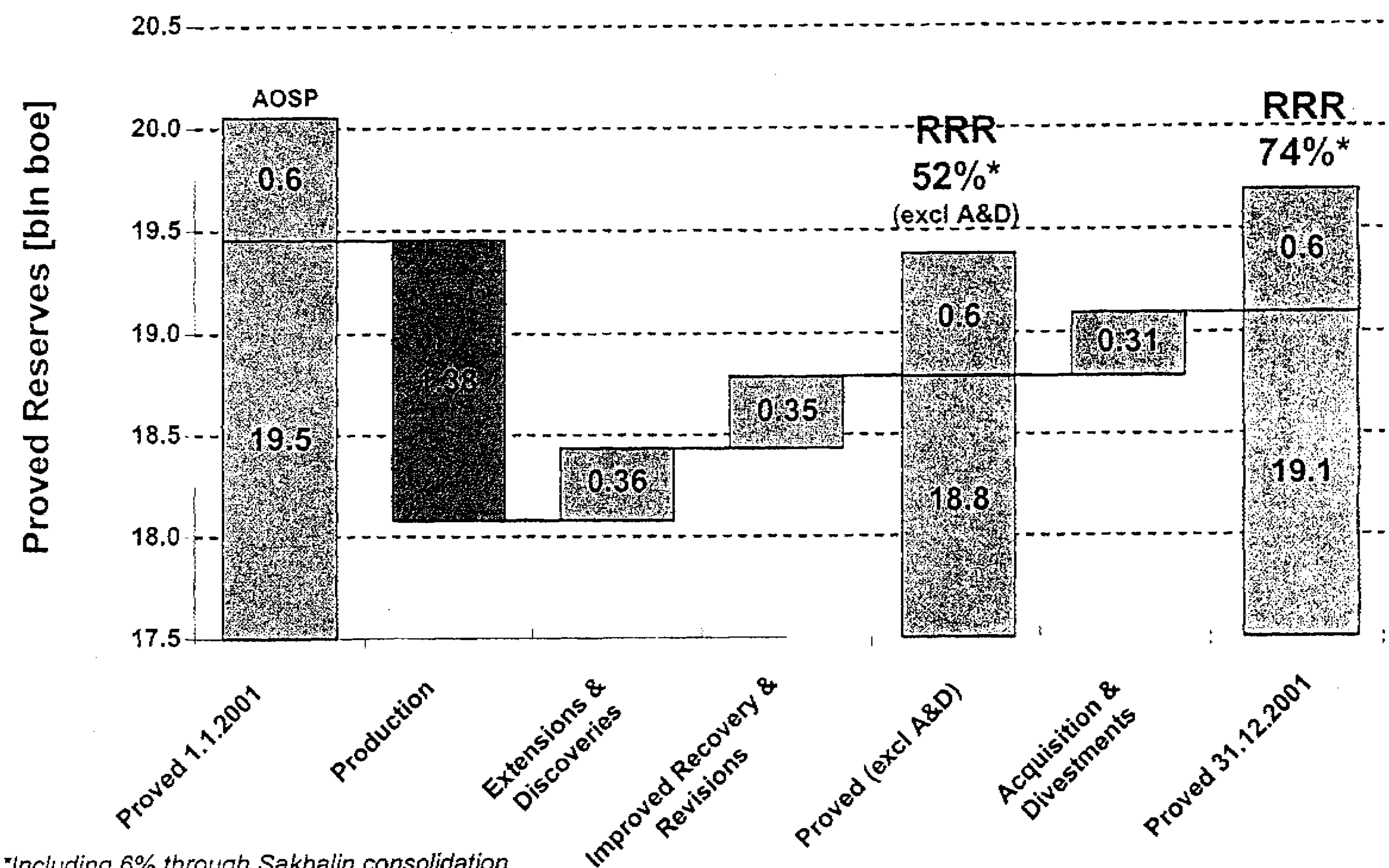
Figure 1: Total BOE Proved Reserves 2001



*Including 6% through Sakhalin consolidation

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Figure 2 : Finding and Development Cost

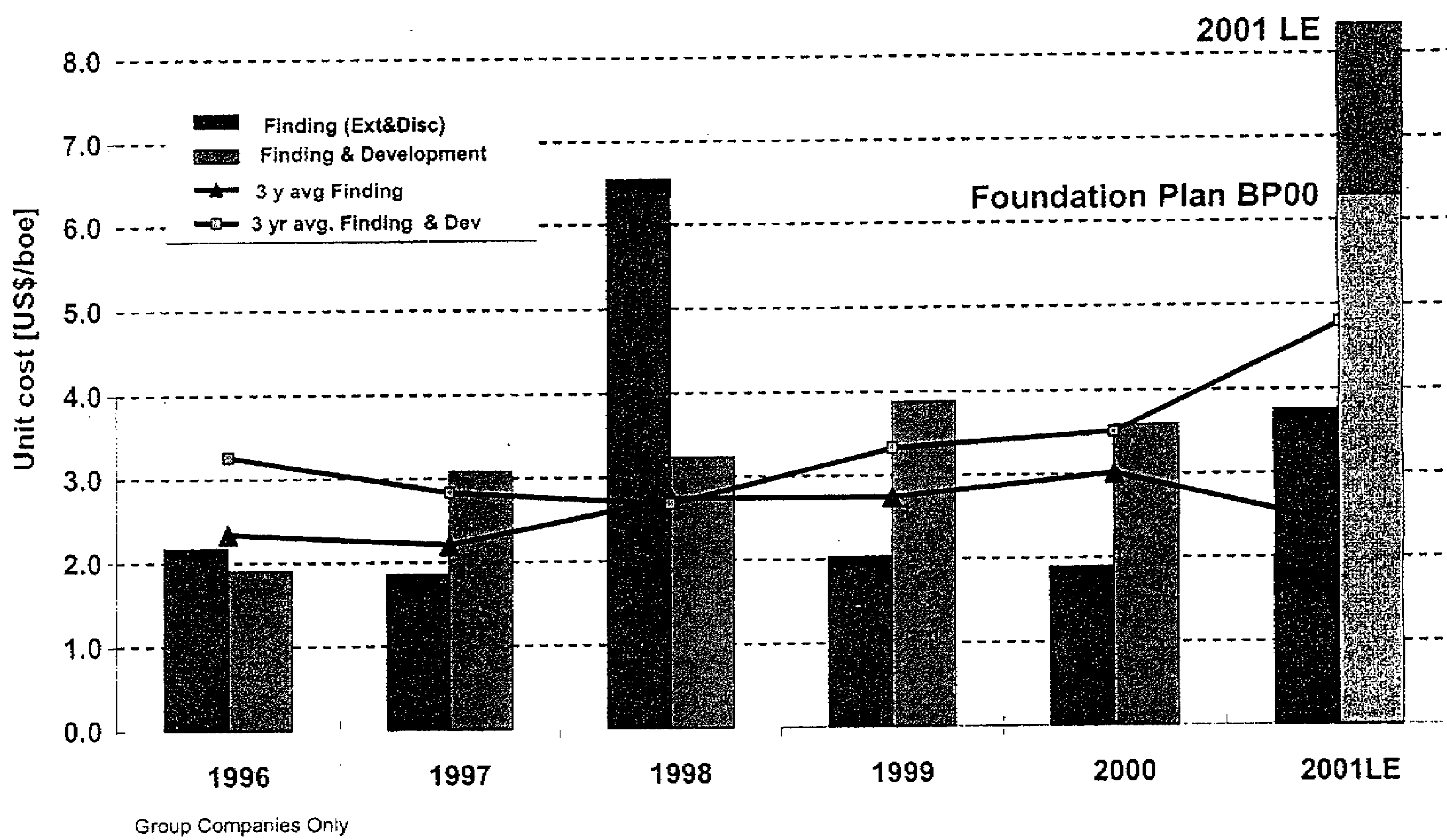

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Figure 3 : 2001 Reserves Actual versus Target

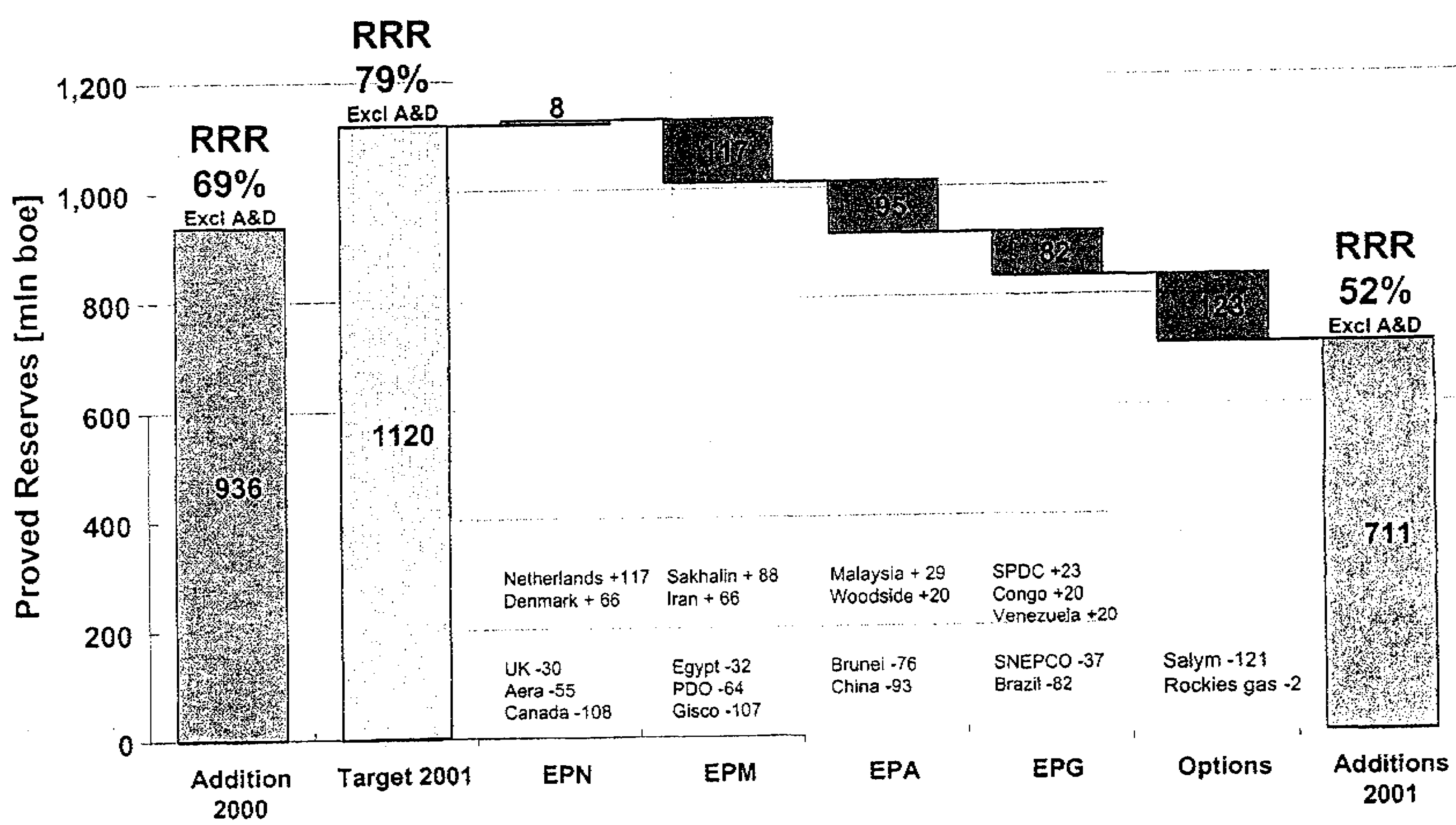

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Figure 4 : Proved RRR (incl A&D)

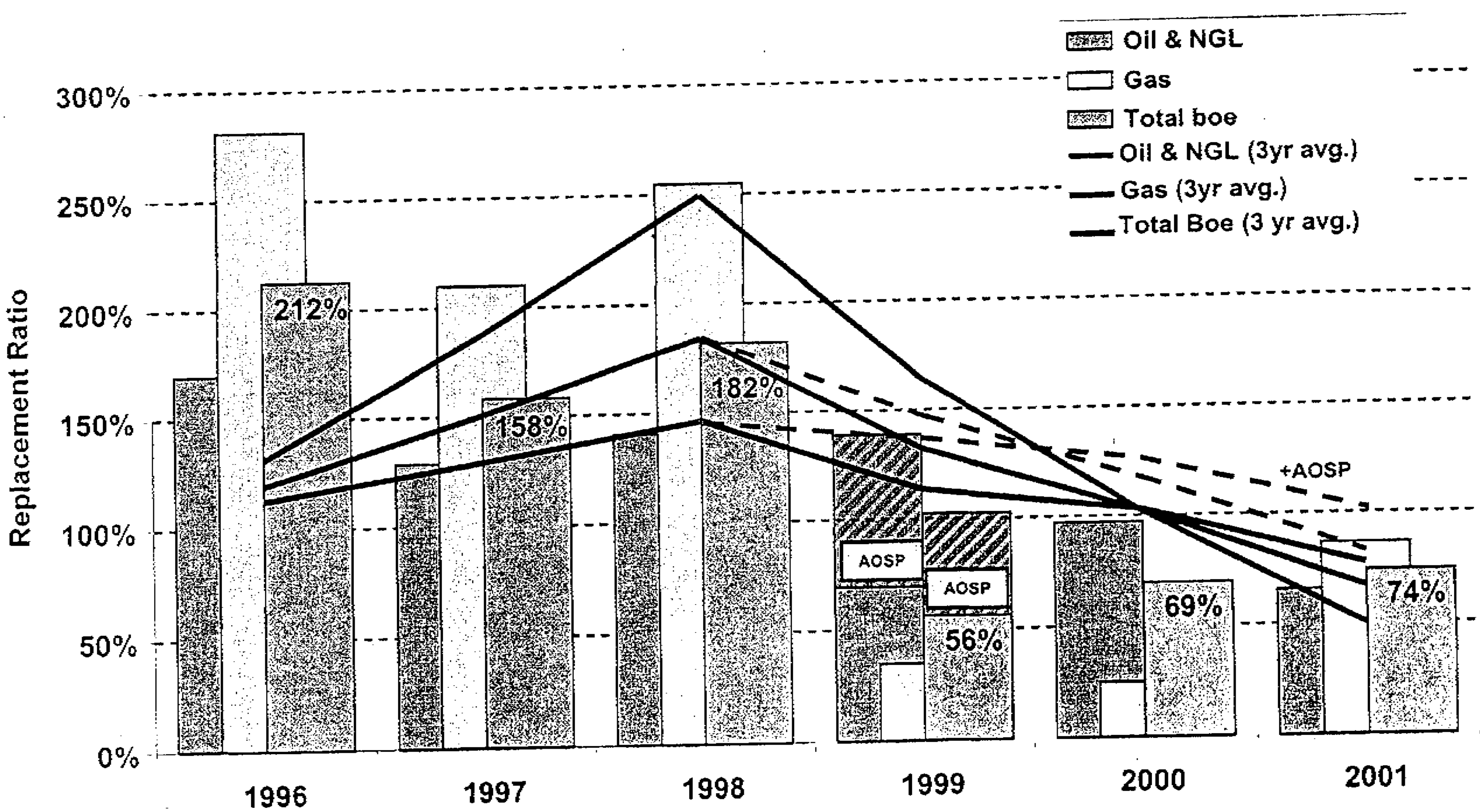

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Figure 5 : Proved RRR (excl. A&D)

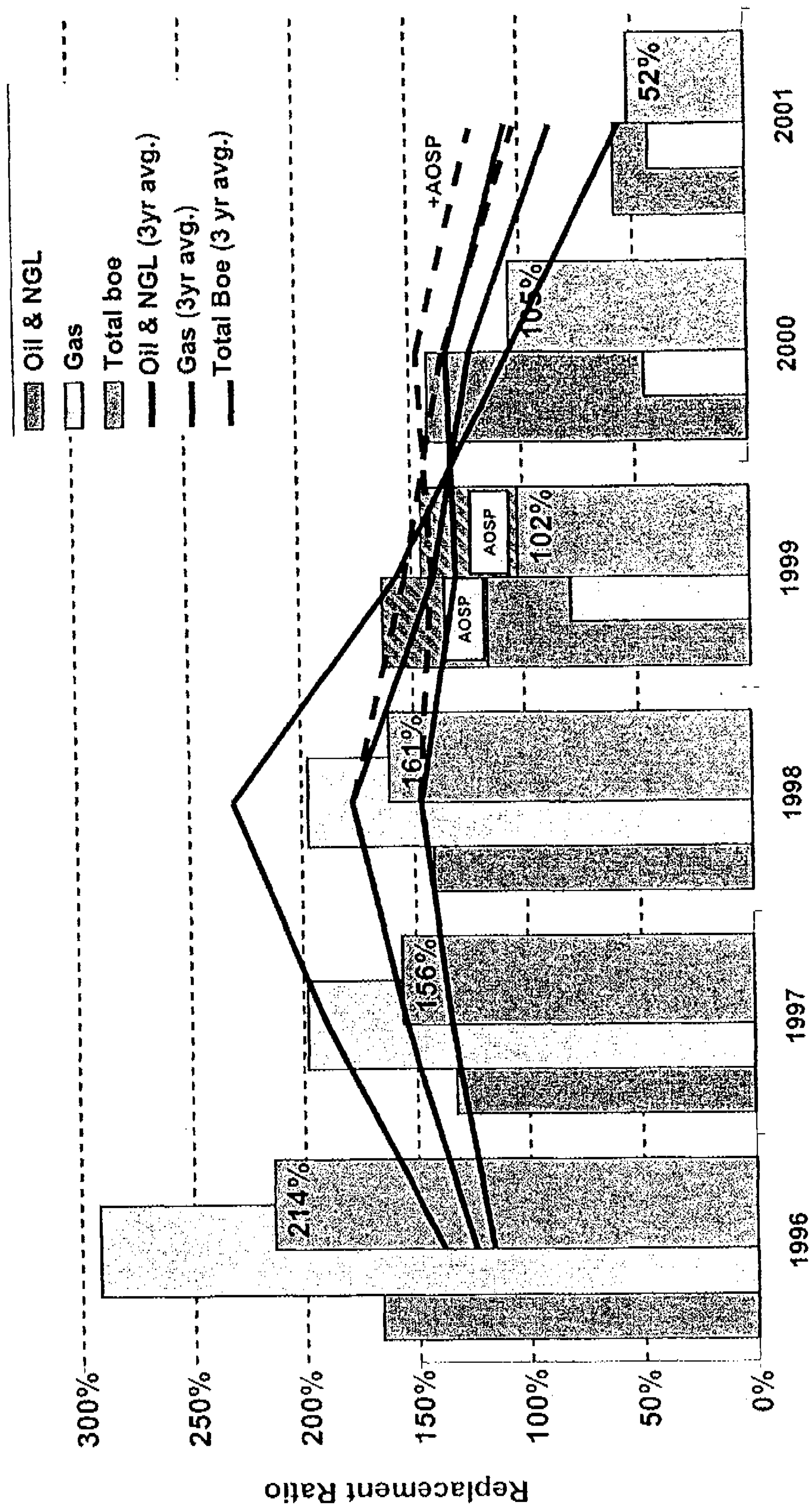

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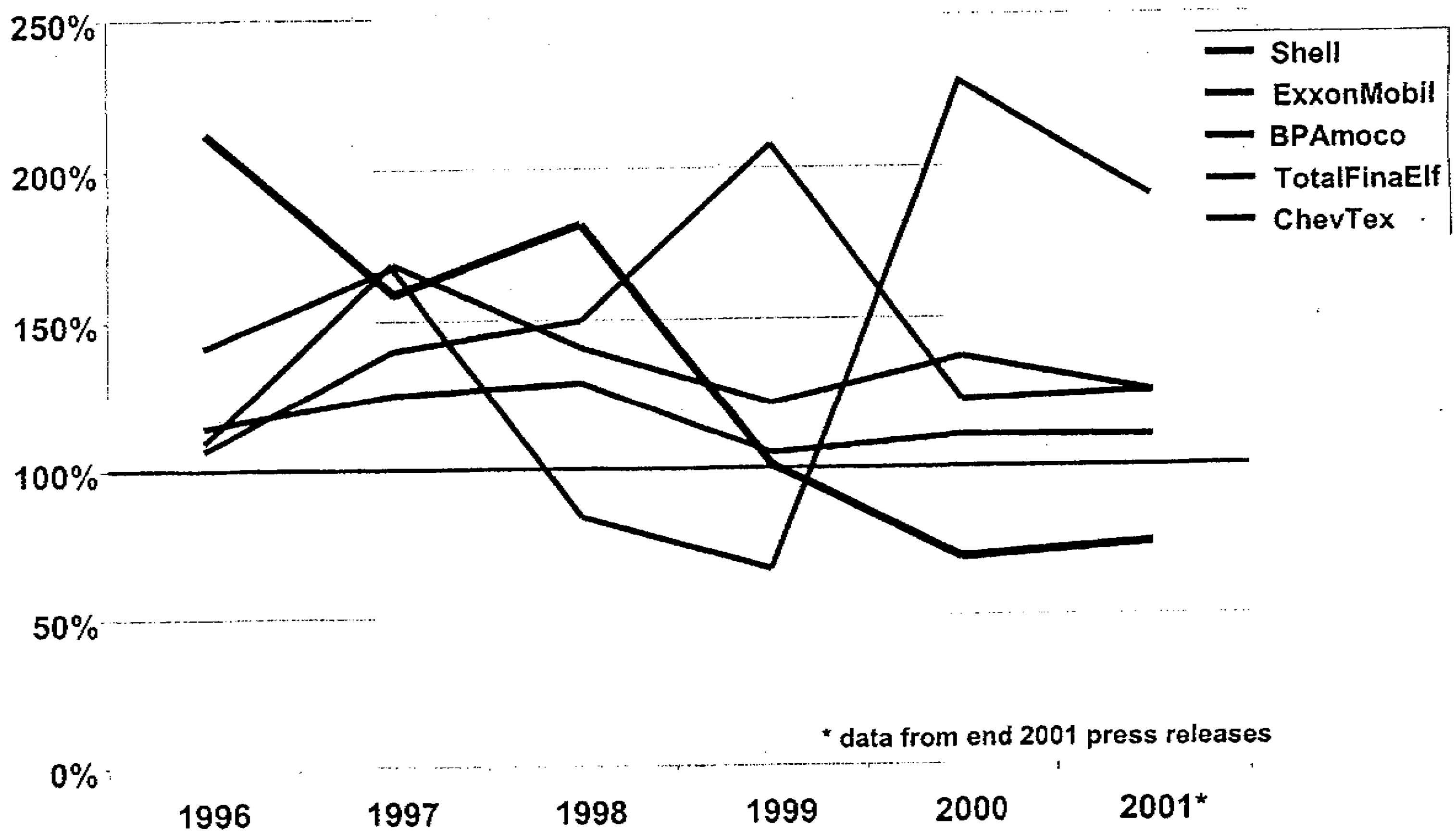
Figure 6 : Majors Proved Reserves Replacement Ratio [boe]



* data from end 2001 press releases

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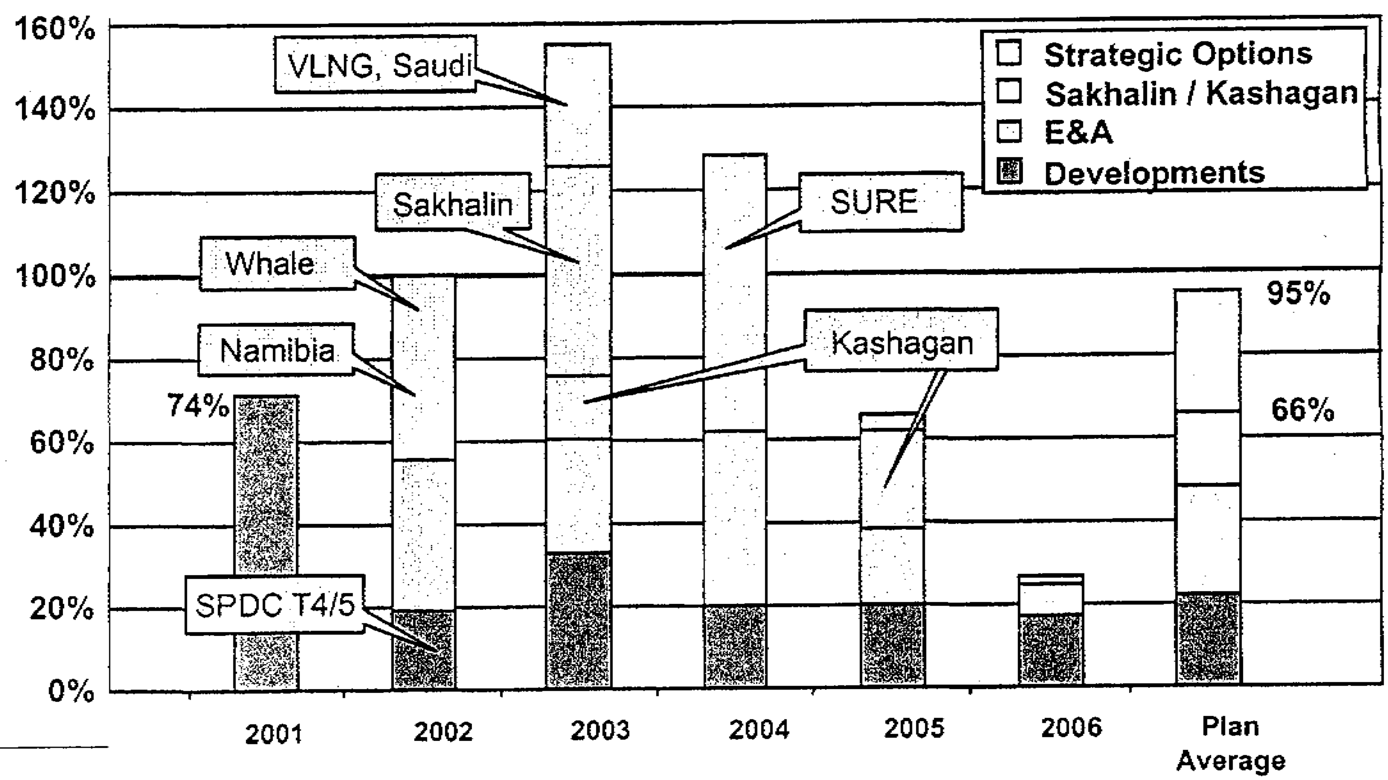
Figure 7 : BP'01 Planned Reserves Replacement



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REDACTED

Unknown

From: DAVIS, PHIL P.
Sent: 14 May 2002 10:15
To: WARD, BRIAN B.J.
Cc: DUHON, CHRIS C.
Subject: RE: EP Excom - RRR

ProvenGas.ppt

Brian,

I have attached some plots that show the basis for the current proven gas reserves volume of 89 bcm3. Approximately half are associated with NLNG Trains 1 to 3 and the other half with domestic/regional supplies.

The reserves assume massive growth in domestic/regional supplies over the next few years, which would be questionable even for an expectation case, let alone proven reserves. The names used for the different categories of domestic gas in the attachment are confusing so please do not read anything into these. However it is interesting to note that the West African Gas Pipeline is one of them (5.3 bcm3).

In the Country Review we have defined a key review point for the Growth Strategy in the second half of 2003, prior to committing to the T4/5 upstream projects. My suggestion is that we freeze both oil and gas reserves until this major review point.

SPDC have committed to carry out an internal review of the gas reserves by q3 2002, as the current basis is far from clear. A pragmatic solution might be to replace some of the domestic gas with T4/5 (approx 29 bcm3) - at least FID has been taken on the downstream T4/5 project and SPDC have entered binding delivery contracts with NLNG. This would be a more defendable position prior to a more thorough review in late 2003. Note, however, that EPB consistently advise not to book the T4/5 reserves until the upstream projects have been matured i.e. in 2003 (I personally feel this is over conservative).

I hope this gives flesh to Chris's statement below.

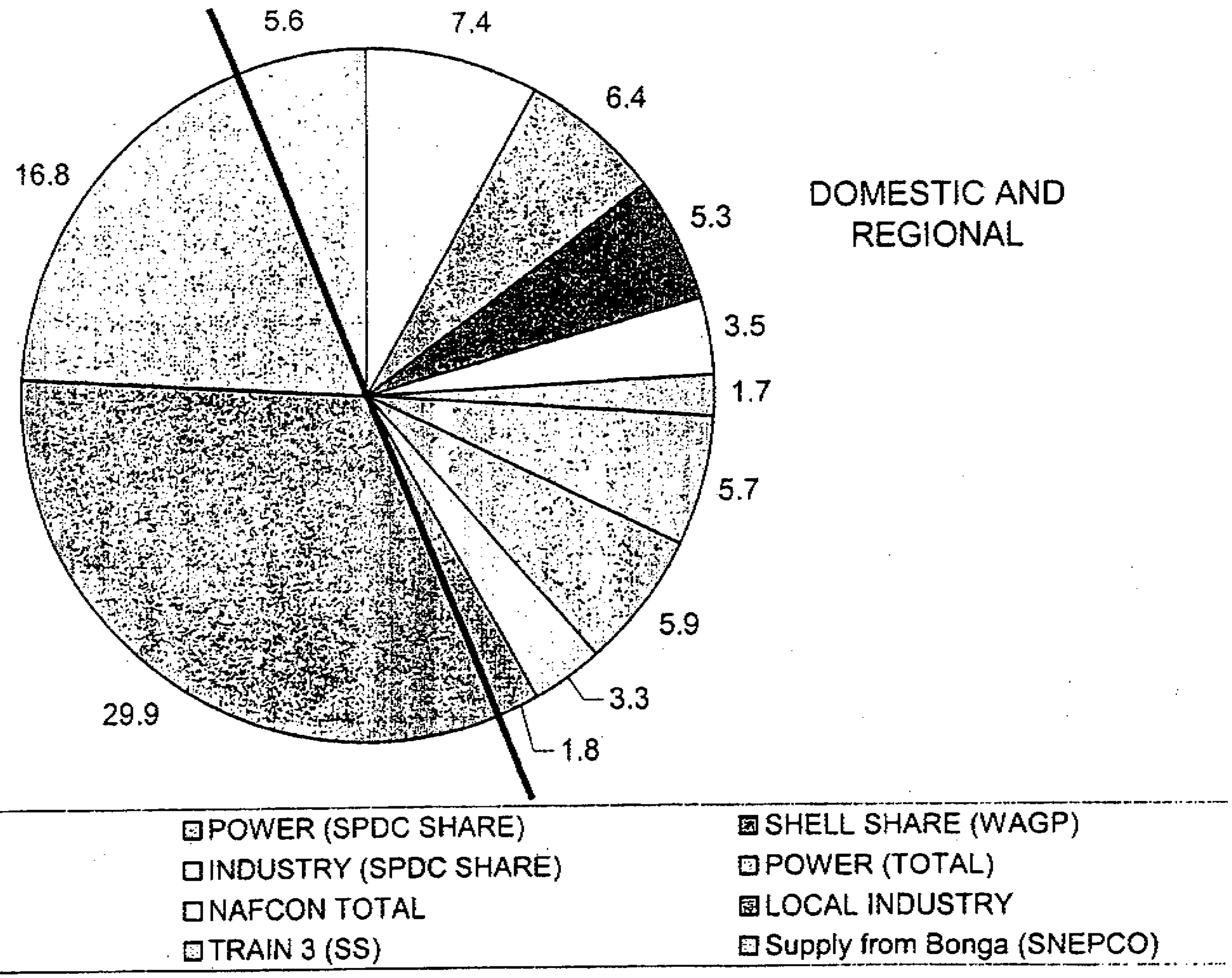
Phil

> -----Original Message-----
> From: DUHON, CHRIS C.
> Sent: 13 May 2002 11:54
> To: WARD, BRIAN B.J.
> Cc: DAVIS, PHIL P.
> Subject: RE: EP Excom - RRR
>
>
> Brian,
>
> T4-5 gas reserves have not been booked. A 1.0 TCF booking
> was discussed at length earlier this year. I have asked
> Phil to provide you with specifics ... but the basic story is
> a familiar theme: there is already an excess of gas reserves
> on the books that implicitly cover the T4-5 volumes.
>
> Chris

>
> > -----Original Message-----
> > From: WARD, BRIAN B.J.
> > Sent: 08 May 2002 15:29
> > To: DUHON, CHRIS C.
> > Subject: FW: EP Excom - RRR
> >
> >
> > Chris, I thought we'd booked LNG reserves already?
> >
> > Brian
> >
> > > -----Original Message-----
> > > From: Cook, Linda Z.
> > > Sent: 03 May 2002 19:22
> > > To: WARD, BRIAN B.J.
> > > Cc: Brass, Lorin L.L.
> > > Subject: EP Excom - RRR
> > >
> > >
> > > Brian,
> > > While reading the note to EP Excom on RRR, I was looking for
> > > a mention of LNG projects..... there are major reserves to
> > > be booked in Nigeria now that FID has been taken for Trains
> > > 4/5..... it seems to me the timing of the booking of the
> > > related upstream volumes (GSAs in place) falls in a bit of a
> > > gray area..... May deserve looking into.
> > >
> > > LInda.
> > >
> > >
> > >
> > > Linda Cook
> > > CEO
> > > Shell International Gas Limited
> > > Shell Centre, London SE1 7NA, United Kingdom
> > >
> > > Tel: +44 207 934 3010
> > > Email:
> > > Internet: http://www.shell.com
> > >
> > >
> >
>

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

SEC Booked Reserves - breakdown by contracts



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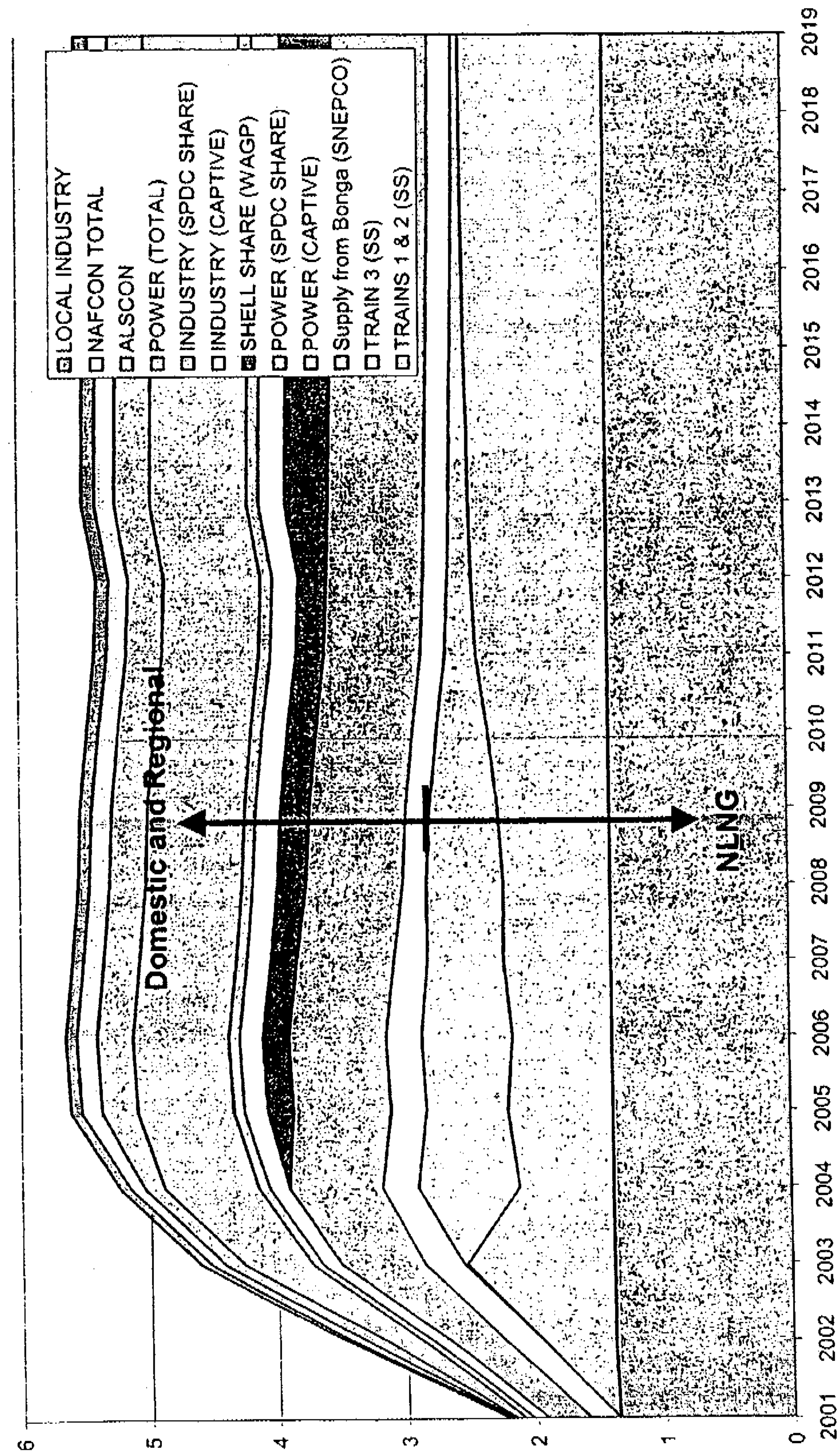
Total sales by contract type



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Unknown

From: Denelle, Frank FR SI-ID
Sent: 31 May 2002 08:05
To: Van Den Berg, Ron M SPDC-MD; 'Ward, Brian BJ SEPI-EPG'; 'Darley, John J SIEP-EPT'; Dubnicki, Carol C SIEP-EP-HR; Cook, Linda LZ SIG-GP; Watts, Lew NL SIG-GPS; Van de Walle, Leslie LP SIPC-OS; Le Mintier, Xavier X SIPC-AFCE
Cc: Van De Vijver, Walter SI-MGDWV; Withrington, John JK SI-ID; Van der Laan, Marian M SI-MGDWV/DIRMB
Subject: Nigeria Country Review 2002 - Note to CMD

Sensitivity: Confidential

Ladies and Gentlemen,

Please find attached the Note to CMD documenting the Nigeria Country Review 2002 signed off by MGDWV yesterday.

Regards,

Frank

Nigeria Note To CMD 30 May 02....

VIJVER 0705

EXHIBIT
Ward 4
1/10/07
GAIL F. SCHORR, C.S.R., C.R.R.

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Note To CMD

Nigeria Country Review 2002

Executive Summary

Previous Country Reviews in 1996 and 1998 recognised the unique position of Nigeria in the Group's EP portfolio. They reviewed the challenges ahead and endorsed the growth strategies advocated. This review gives an update on progress of the business strategies for the **Shell Companies in Nigeria** (SCIN), describes the critical issues associated with the direction outlined, and proposes new responses drawing on **Global EP to "realise Nigeria"**.

For Shell, Nigeria remains a key country, offering a unique opportunity to deliver the Group's growth plans – it has MRH scale resources and Shell is well positioned with its experience at managing the risk exposures. Besides Nigeria potentially has the largest consumer market in Africa with a population of 120 million.

However, Nigeria is recognised as a difficult and unstable business environment with endemic corruption and high country risk. Despite the return to democracy in 1999, many political, economic and social reforms will be required before there is a tangible improvement in the business environment.

In recent years, SCIN has progressed from an oil company to an integrated energy company. It is the EP-GP industry leader, operating 40-50% of Nigeria's reserves and production, and has established a new OP unit aspiring to enter the Retail market. It has maintained its relationships with Government during the delicate transition from military rule to democracy, and is industry leader in Nigerianisation and local content.

At the company level, SPDC continues the transformation started in 1998. SNEPCO has leveraged Shell Deepwater Services capabilities on the Bonga project and had significant exploration successes. The new offshore prospects are promising and the "Train 3" integrated oil and gas projects should come on stream from end 2002. NLNG started up with two trains in late 1999 and has performed well, from the supply down to the market through process and transportation. The third train is on schedule for start up in late 2002 and FID has been taken on the fourth and fifth trains.

However, SCIN growth plans have not been delivered in the past decade due to internal and external constraints, particularly lack of Government funding and delays in approvals. Funding (budget) has improved, but is still an important issue. There is clear slippage in capacity build-up and in Train 3 Integrated Projects. SPDC's asset integrity remains a major concern and there are still significant gaps in executive capacity. Additionally, Shell's production is currently constrained by OPEC quota restrictions and proved reserves have been subject to a booking moratorium since 2000 reflecting delays in delivery of the growth plan.

Considering the importance of Nigeria for the Group and the commitments already made, there is no alternative but to continue with the strategy of the Growth Programme. Every support will be given by the Group to ensure sustainable growth and delivery, and continue to address Shell's asset integrity and other critical issues in Nigeria. New ways of working will be implemented, supported by a stronger governance model.

There are key milestones associated with growth delivery in the next 18 months – start up of EA and Bonga, Nigeria elections, developments on OPEC and Quota. SCIN delivery will be closely monitored over these months. This will include; implementation of a restructuring of the management capabilities within SCIN; strengthening and clearer focusing on the Country Chair role and dedicated support; redefinition of the SCIN/EP relationship in particular and quarterly CCh-RBDs progress meetings with reports to the RMD. Strategic options will be simultaneously developed to increase robustness of the

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growth strategy, and to respond optimally in case the Growth Programme cannot be delivered as planned. A new review will be conducted in Q3 2003, after the elections and before a series of new major investment decisions, to confirm or otherwise Shell's strategy in Nigeria.

Critical to Shell's success in Nigeria will be to **win the "hearts and minds" of the Nigerian and expatriate staff** working in SCIN. Only a continued outstanding and visible **leadership** built on Shell's core values and combining vision, strength and care can achieve it.

1. The Country

1.1 Nigeria Overview

Nigeria is the fourth largest economy in Africa – with a GDP at current market prices of around US$40bn – one quarter the size of South Africa, just under half the size of Egypt and slightly smaller than Algeria (the other equal leading hydrocarbon producer and exporter on the continent). The track record of Nigerian growth has been poor, with an annual GDP average of just 1.6% in the 1980s and 2.4% in the 1990s. It has been undermined first and foremost by economic mismanagement and secondly by the challenges of managing development with volatile oil revenues. Nigeria has abundant natural and human resources, including oil, natural gas, fertile agricultural land and the largest African population of 120 million providing an abundant workforce and huge domestic market. Yet the majority of Nigeria's people are poor. Income per capita at US$300 per annum is close to the poorest in Africa, including that of Mali and the Central African Republic – both landlocked and resource-deficient African states.

Nigeria has only just emerged from decades of successive military governments, all of which have been characterised by mismanagement of Nigeria's abundant oil wealth. Elections and the restoration of a civilian government in 1999 have raised hopes for economic and social improvements in Nigeria, but the Government faces an immense task. The Nigerian economy is distorted and inefficient by most international standards. It is also highly indebted and successive years of under-investment have allowed economic decay to set in, even in the key hydrocarbon sector.

Nigeria abandoned restructuring programmes initiated by the IMF in early 2002, after consistently failing to meet economic targets. Both the World Bank and the IMF seem to have run out of ideas on how to assist in the recovery of the world's sixth-largest exporter of oil. Confidence in their ability to influence a vast country divided by ethnic rivalry and religious differences has slipped away. The schism is exacerbated by deepening poverty (some 66% of the population live below the poverty line) and an increasing prevalence rate of HIV/AIDS.

President Obasanjo elected in 1999 promised a new order, free from the corruption, brutality and decay that flourished during the 15 preceding years of army rule. As the 2003 elections draw near, there is a growing feeling among Nigerians that their Government has not lived up to the challenge. Next year's elections will be as critical as the handover 3 years ago from military to civilian rule. Nigerians are not alone in their apprehension. Africa has everything to gain from the stability of its most populous nation, and much to lose otherwise.

1.2 Scenarios

The future development of the Nigerian economic, political and business environment is highly uncertain. The key dates to watch are the 2003 and 2007 elections. While the 2003 elections are attracting all the attention, it may be 2007, with knotty issues of succession, that is a "make or break" for Nigerian democracy. The question is not so much who wins, but rather: will the elections be – by standards accepted by most Nigerians – free and fair?

Nigeria has a number of "hurdles" to cross to achieve political stability and economic reform. Despite some hopeful early indications, there are many different ways in which the country could stumble. Oil dependency remains entrenched. Key institutional developments that will have a major bearing on progress include transparency and accountability in governance, establishment of law and order, investment in education and health, as well as the mechanisms for distributing revenues between Federal, State and local government. Key economic developments include privatisation, exchange rate liberalisation, liberalisation of key economic sectors, improving infrastructure, management of government spending, managing the resulting unemployment, and attacking corruption.

In **Learning to Fly**, the major hurdles of institutional and economic reform are the landmark elections of 2003 and 2007. Progress is initially slow and corruption and bad practices are difficult to uproot. But by 2010, Nigeria is politically much more stable and is poised to grow steadily.

In **Puppeteer**, political opportunists win a controversial 2003 election. Reforms are blocked, corruption entrenched. Increasing political violence leads to the 2007 elections being postponed, provoking a short-lived coup. Fresh elections are held but Nigeria has wasted ten more years.

In **Road to Ruin**, a disputed 2003 election leads to increasing political violence, with onshore oil facilities as both target and prize in the struggle. In 2007, secessionist threats lead the army to step in to prevent break-up. In 2010, Nigeria is at a crossroads – painful rebuilding or else complete collapse looms.

In parallel to the political scenarios there are two scenarios that describe how one of the key constraints on production – OPEC – might evolve over time.

In **Strong Cohesion** Nigeria remains a faithful member of OPEC, which maintains its role as swing producer against an increasing share of non-OPEC supply. World economies recover strongly resulting in oil demand growth and high oil prices to 2006. Total OPEC production increases with Nigeria securing a quota of 2.8 mb/d in 2006. However, the high prices stimulate strong growth from non-OPEC countries, causing a supply glut and oil price collapse in 2007. This stifles further growth in OPEC production until non-OPEC oil starts to decline in 2009.

In **Nigeria Out** the world economy recovers more slowly causing OPEC to maintain strict production control; Nigeria fails to secure significant additional quota. A further weakening of oil prices happens due to over supply. This results in OPEC demands for further cutbacks. Nigeria initially "over-lifts" then quits OPEC, as it is not prepared to reverse its growth plans. Bi-lateral sales agreements are reached with the USA. And production constraints are lifted. Production reaches 3 mb/d in 2006 and 4.5 mb/d in 2010.

1.3 Energy Scene

Nigeria's potential continues to attract energy companies, despite the country risks and OPEC quota constraints.

In the upstream, Shell is the strongest player regarding operated production and reserves, the largest oil sector's employer, and has the most ambitious growth targets for Nigeria. Other companies include:

- **American IOCs** – The ExxonMobil (EM) and ChevronTexaco (CT) mergers have created portfolios for each of these companies that while still smaller, now mirror the diversity and balance of SCiN's. Texaco and Exxon have brought deepwater positions and expertise complementing the substantial producing positions of Chevron and Mobil mainly in the shallow offshore. Supported by a strong US Government lobby, these companies represent the biggest threats to SCiN. CT's lack of other major West African assets places key strategic importance on growing its business in Nigeria, resulting in a more focused and aggressive competitive approach over the last two years.

- **European IOCs** – TotalFinaElf (TFE) has also gained a more balanced portfolio through its mergers, but seems to currently give priority to Angola for its deepwater discoveries. Agip is aggressively pursuing growth in volumes. It has adopted a strategy to show that it can operate in a variety of venture settings with small but strategic new ventures planned or being implemented in deepwater, a joint operatorship with the Nigeria National Petroleum Company (NNPC) and a mooted LNG scheme.

- **The Indigines** - Collectively these are beginning to form a competitive threat to SCiN in so far as they have been protected from the effects of quota restrictions. Volumes produced by indigenous operators have risen to some 160 kb/d, approaching 10% of current quota constrained production.

In downstream gas, competitors' initiatives include the mooted LNG project of the three US consortia, the Agip/NNPC LNG project, the Chevron/Sasol GtL project, the WAPCo (West Africa Pipeline Company) project, and the power projects of the SPDC JV (Afam) and Agip JV.

The domestic gas market is small and unstructured, but growing. SPDC is the dominant supplier and CT currently the only other supplier, with an aggressive associated gas (AG) based supply strategy in the Western Domestic gas market. The domestic power market remains small, but growing and is presently a Government monopoly of the Nigerian Electricity Power Authority (NEPA).

In downstream oil, Shell's largest competitors (EM, CT and TFE) have a retail presence in Nigeria, whereas presently Shell does not. There are also "local majors" like Unipetrol (to which Agip has just sold out) and in the open market, independents. The nation's Oil Refineries are presently owned and operated by NNPC. The Government is presently conducting a tender for construction of additional private refineries, attracting interest of some indigenous companies.

2. Shell in Nigeria

2.1 Group Overview

With respectively 33% and 27% of Shell's oil and gas expectation reserves, Nigeria is a key component of the Group's resource portfolio. Shell has the leading position in the country's energy industry, plays the lead role in deepwater and has financial strength combined with global gas marketing capabilities. Nigeria gives unique access to MRH scale resources, with established onshore production on fixed margin terms, favourable compared to other MRH opportunities and providing low price robustness in the EP portfolio. At the same time, the deepwater opportunities provide balance to capture upside at high oil prices.

Nigeria is the most material organic growth opportunity in the EP portfolio that is "ready to go", expected to contribute ca. 2.5% a.a.i. growth to EP if the Growth Programme is successful. Shell has the aspiration to grow by retaining its position of industry leader in Nigeria, with a Shell-operated share of some 40-50% of a growing production and reserves base. This vision is closely aligned with the Nigeria Government's Vision 2010.

2.2 Shell Companies in Nigeria

Shell has three businesses in Nigeria, namely EP, GP and a much smaller OP business, operating through seven companies or subsidiaries. Those are listed below and their key performance indicators given in Appendix 1.

SPDC (EP) - The Shell Petroleum Development Company of Nigeria Ltd is a 100% Group Operating Company. SPDC is the operator of the unincorporated JV where it has 30% Shell equity (NNPC 55%, Elf 10% and Agip 5%). The JV is one of the cornerstones of the EP portfolio, especially robust at low oil-prices. The 2001 ROACE performance was 43% (including an exceptional item of $70 million), oil production of 837 kbopd (JV) and gas sales (JV) of 729 mmscf/d.

SNEPCO (EP) - The Shell Nigeria E&P Company Ltd. is developing both operated and non-operated discoveries (Bonga, Ehra, Abo) and is continuing to build a strong acreage position as new blocks become available. First production should be in 2003 (Abo) and Bonga is planned to come on stream in early 2004.

NLNG (GP) – The Nigeria Liquefied Natural Gas Ltd is a Joint Venture Company (JVC) with its own Board (Shell 25.6% interest, NNPC 49.0%, AGIP 10.4% and TFE 15.0%). Started in 1999, the JV will be the world's 3rd largest plant by 2005. All trains have largely been on schedule and budget and they have been very successful in securing additional cargoes. They are the flagship industrial development in the whole of West Africa. NLNG's 2001 NIAT was $123 million and is expected to increase to ca. $300 million by 2006

BGT (GP) – Bonny Gas Transport Limited, shareholding Shell 25.6%, NNPC 49.0%, AGIP 10.4%, TFE 15.0% plans to have the world's largest fleet of 18 LNG carriers for Trains 1-5 inclusive.

SNG (GP) – Shell Nigeria Gas is a 100% Shell Company, holding a small low-cost (but low return) gas-distribution option in the portfolio and preparing for the expected growth in domestic and regional gas markets.

SNOP (OP) – Shell Nigeria Oil Products (currently 100% Shell Company) is the new downstream operation, established after the divestment of Nolchem in 2000. Relatively small but profitable, it will help delivering the Shell brand and reputation in support of EP-GP operation. SNOP is planning to further develop Commercial fuels and Lubricants businesses, and a two-stage re-entry into the Retail business – some 35 Shell outlets in major Nigerian cities – possibly in partnership with a local company. A separate Note on the subject will be submitted to CMD.

Others – Shell Trustees Nigeria Ltd, subsidiary of SPDC and 100% Shell Company, manages the Shell Nigeria Staff Non-Contributory Pension Fund ($250 million assets) and Shell Thrift & Loan Fund, mainly covering SPDC current and former employees. Another 100% Shell subsidiary will hold Shell's interest (33 %) in the Niger Delta Loan facility ($30 million).

2.3 SCiN and the External Environment

Competitors – Despite the competitive pressures, the SPDC JV continues to secure the highest share of Government funding. Having disproportionate (54%) access to NLNG is a key competitive advantage for SPDC and SNEPCO given the flare down requirement in 2008. Competitors (especially CT) with no access to NLNG must mature their own solutions for gas, lagging SCiN and constraining their oil developments in some cases.

SCiN's share of Nigeria quota has slipped from 41% in 2001 to 37% in 2002 as indigenous producers have been protected from OPEC cuts and the Government decided to include spiked condensate within allocated quotas. SCiN is lobbying to redress this with the Government.

Communities – People of the Niger Delta continue to demand a greater stake of the oil income. The Government has responded through the 13% derivation fund (% of Government oil revenues now flowing to oil producing states), and the Niger Delta Development Commission (NDDC) funded jointly with the Oil and Gas Industry. The situation has improved, but corruption at the State and local government levels is limiting the benefits seen by local communities. Rebellious elements in the Niger Delta exploit this situation to extract additional benefit from the industry (245 community disruptions, 53 hostage/kidnap incidents and increasing oil theft in 2001) and damage facilities, resulting in 1536 project man-days lost and 35 MMbbl oil deferred in 2001. Meanwhile, SCiN spent a record $60m on Community Development (CD). As Shell has the largest onshore acreage, it is more exposed than any other operator, and is also more associated with community issues in Nigeria in the eye of the public.

Government relations – Since 1999 SCiN has forged new relationships, created networks and taken proactive measures to build capacity with the new democratic Government. Government relations are good at the highest level, and the relationship with the new NNPC is improving after two difficult years in 1999 and 2000, where bureaucracy delayed projects and threatened to stifle industry initiative. However, the environment in which the SCIN/NNPC relationship exists is still difficult, with NNPC under intense scrutiny and challenge on all fronts, from the legislature in particular. While industry is continuously challenged to do more on local content, SCiN has gained "off the record" credit with

Government as industry leader in local content, in contracting industry capacity building initiatives, and in the level of Nigerianisation of its workforce

Stakeholder engagement and reputation management – Within Nigeria, a comprehensive approach has been adopted with respect to engagement with communities, local and international NGOs, the media and all tiers of Government. Openness and transparency are essential qualities of such engagements.

A full-time team based in London assists Shell in Nigeria with managing its reputation and with its engagements with international NGOs, international media and others interested in Nigeria (including UN agencies, the World Bank organisation, development agencies and foreign governments). The aim is to remain in touch with such organisations so that issues of concern (including human rights) can be discussed and dealt with at an early stage, and to encourage stakeholders to work with Shell in Nigeria.

2.4 Business Strategies

Shell Nigeria has value components along all three Group strategic pillars. **Making the most** includes the existing assets and committed business for the onshore part of the JV, the shallow offshore, NLNG and SNOP. Here the focus is on operational excellence, active portfolio management, and capital efficiency. **Getting new business** includes the upstream portfolio related to Trains 4&5, a potential Train 6, exploration in the shallow offshore, the Deep Water portfolio, Shell Trading and SGS. **Breaking new ground** includes the potential for swaps and the development of a strategy to monetise non-associated gas.

In the short term, the focus is on delivery of profitable growth, mainly oil production supported by a significant contribution from NLNG. Over the next five years, SCiN NIAT will move from relying exclusively on swamp and land production in the SPDC JV, to a more diverse, financially robust portfolio with a roughly equal three way split between NLNG, deepwater EP and shallow offshore/onshore EP, plus OP with revenues generated largely through continued crude trading and a Retail re-entry.

2.4.1 Exploration & Production

EP strategy is to grow SCiN operated production to 1.5 mb/d by 2005, and to 2 mb/d by 2010 from the current 670 kb/d OPEC-constrained rate (the unconstrained rate is 860 kb/d against a 2002 target of 834 kb/d). SNEPCO will be one of the top-10 producing EP OUs by 2005, providing significant upside to the Nigerian portfolio, especially at high oil prices.

This strategy remains aligned with Nigeria's ambition to grow production to 4 mb/d and reserves to 40 billion barrels by 2010. The growth is ambitious, requiring access to significantly increased OPEC quota and assuming limited constraints on delivery.

2.4.2 Gas & Power

Current GP strategy is still very much in support of the upstream business: through the competitive priority that it generates for SCiN integrated upstream oil and gas projects in the Government and NNPC planning. Currently this is manifested through the achievement of high SPDC JV budgets in 2001 and provisionally in 2002, and it is also expected to facilitate OPEC quota capture in due course when T3 and T4/5 supply projects come on stream.

NLNG – Train 3 is now targeted to start up in Q4 2002, the LPG facilities for Trains 1-3 to commence export in Q1 2003 and Trains 4&5 to start up by Q1 2006. **Key is for SCiN (EP) to continue to meet its gas supply commitments to NLNG, which, otherwise, has the option to go for other AG suppliers (competitors).** Discussions for a 6th Train may commence during the course of 2002. If all 6 Trains materialise, the total contracted volume of the entire NLNG-JVC will amount to 25 Tcf (of which the SPDC JV will supply about 60%). This compares with Nigeria's gas reserves of 140+ Tcf, which shows the enormous scope for further utilisation schemes (FLNG, SMDS, pipelines, domestic market or further LNG trains in the longer term).

Other gas opportunities –. SNG aspires to be the leading gas distributor to domestic industries, the commercial sector, bulk LPG users and small IPP's, but this business will remain small for the next 5 years. Apart from inherent profitability, market/customer risk and the need for innovative securitization arrangements are the principal current challenges. In the longer term, opportunities may also exist to monetise SCiN's abundant NAG reserves to international and domestic markets beyond the requirements of NLNG. These will require feasibility study attention to develop options.

2.4.3 Other Businesses

SNOP – OP's aspires to be one of the three most profitable downstream oil companies in Nigeria on a ROACE basis. Shell Nigeria Oil Products (SNOP) will focus on developing the commercial fuels and lubricants market and entering the retail market (possibly with a local Partner). SNOP offers ways of communicating Shell brand to customers and to enhance Shell reputation in and outside Nigeria and vis-à-vis government

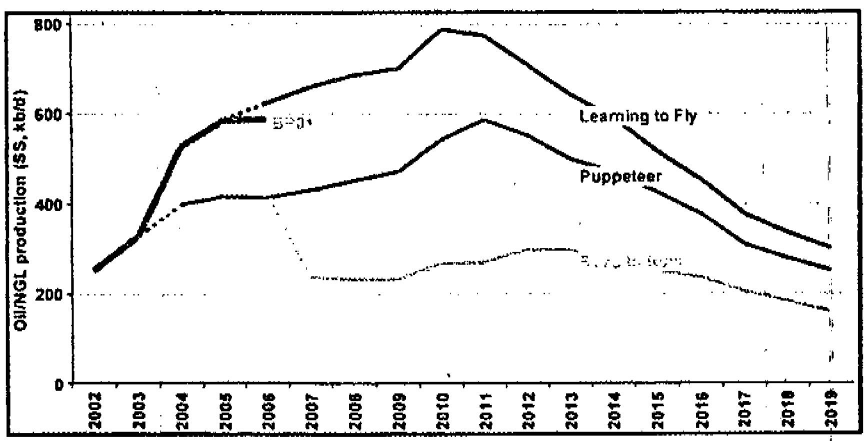
Shell Trading is the leading importer of refined products for NNPC. Commitment to quality, reliability and relationships are key differentiators.

Global Solutions – SGS acts as consultant to NNPC at the Port Harcourt Refinery, now experiencing the highest levels utilisation for a decade and is contracted to manage the Warri Refinery Turn Around Maintenance (TAM).

Renewables – Solar has some activity in Nigeria mainly consisting of tendering for SDPC projects, involvement on Community Development (CD) projects and a new possibility on a residential estate development by Shell Trustees.

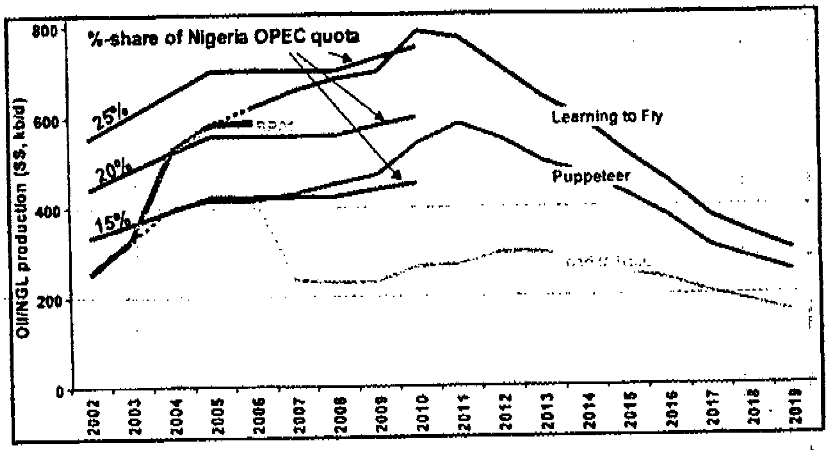
2.5 Scenarios Sensitivities

Some initial assessments of the Growth Programme in the light of the Nigeria scenarios have been made. This work will be further developed during the next Business Planning cycle. The current EP-GP Business Plan (BP01) production forecast tallies with the assumptions of the **Learning to Fly** scenario. Under this scenario, SCiN related production would increase to almost 50% of the 4 mb/d Nigeria Government vision by 2010 (780 kb/d is Shell share), coming from SDPC JV (1,540 kb/d onshore, 130 kb/d shallow offshore) and SNEPCO (230 kb/d). Domestic gas and power markets would grow. The OP plan is also based on this scenario.



In **Puppeteer**, the domestic gas markets would grow at a reduced rate as a consequence of, inter alia, delays in the necessary liberalisation measures. Delays in Government approvals would likely impact the GP projects (e.g., SNG, Afam, Abuja), the Exploration and Appraisal follow-up and most Deepwater projects. It is also likely that the Group would want to control country exposure. Shortfalls in AG supplies to NLNG would be compensated by increased NAG. Production under this scenario would be some 200 kb/d (Shell share) lower than planned under the Growth Programme from 2003 onwards. Total oil production is approximately 600 million bbls less than current proven reserves (Shell share). For OP, the Puppeteer environment is similar to what has been experienced and managed in Nigeria prior to 1999. This would entail renewed pressure on SGBP (Human Rights) and Group reputation.

Road to Ruin would lead to scaling down of all projects, although additional NAG projects may be undertaken to secure supplies to NLNG. Total production under this scenario is 2 bln bbls less than current proved reserves. For OP, investment proposals would be frozen but the lubricants and commercial businesses could continue to profitably operate albeit on a small-scale basis. **Road to Ruin** is included mainly as a robustness test and is arguably a less likely outcome than the other scenarios.



In addition to the Nigeria Scenarios, the impact of OPEC is central to Shell's growth prospects. The two OPEC scenarios, **Strong Cohesion** and **Nigeria Out**, start to differ from each other only after 2007, when Nigeria leaves OPEC under **Nigeria Out**. **Learning to Fly** requires an increase of Shell share of Nigeria's quota (and/or combined with institutionalised "over lifting") from today's 12% (37% JV) to 20% before the end of this plan period, 2006. At the same time, the competitors are also investing on the assumption of an increase in their share of quota, making for a highly competitive environment.

3. SCiN Challenges and Responses

As documented in the 1998 Country Review, Shell faces a large number of serious challenges in Nigeria. This is particularly true for SPDC. The JV is central to SCiN, as major operator of Shell's interest, main supplier of gas to NLNG and SNG and service provider to the other Shell interests. Besides, SDPC Directors largely represent the Shell face to external stakeholders, as they double hat many SCiN activities. SPDC performance impacts on all Shell's interests in Nigeria.

A recent joint EPG/SPDC review has shown that, despite the transformation of SDPC started in 1998, considerable capability gaps remain. These relate to the existing business – particularly the management of hydrocarbon production, asset integrity and the effectiveness of basic services – as well as to the major challenges posed by the Growth Programme. The Country Review has confirmed that, despite progress in a number of areas, the long list of issues facing SCiN presents a serious challenge for the already stretched staff in Nigeria. Responses will require an acceleration of the change process combined with new approaches in partnership with the Group, drawing on the resources and capabilities of Global EP, to ensure they are resolved or at least managed in the most effective manner. The management style, which evolved in response to handling ongoing daily issues and crises has given SCiN a unique flexibility and capacity to adapt. A more structured approach with stronger governance is now required to simultaneously manage/resolve SCiN issues and lead the implementation of the Growth Programme.

Issues identified as top priorities for immediate action are described in the following sections with *responses in italic.*

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3.1 Secure increased OPEC quota

In recent months, Nigeria has had to constrain production to adhere to its 8% share of OPEC production. Meanwhile SCiN's share of Nigeria quota fell from 41% to 37%, while its reserves and production capacity are over 50% and 46% of the country respectively (indigenous producers are exempt from quota). This is currently limiting SCiN production by 200 kb/d (100% JV). OPEC quota will be an even bigger issue for EA and Bonga, as production from these offshore projects generates less revenue for the Government than production from the onshore JV does. Given the major projects due to come on stream in the coming 2 years, a solution must be found to remove this constraint.

Responses: in the short term, the SCiN's strategy is to increase its share of the Nigeria quota. It relies on (i) engagement of NNPC, the Presidential Adviser on Petroleum Matters and the Presidency, (ii) media campaigns (to bring EA and other projects to the foreground) and (iii) technical support (proving the capacity to produce). Other levers are being worked, including improving API quality and ensuring that unreliable refinery take is excluded from nominated take. EA (due on stream at end year) is likely to be a key test of Government policy, as failure to secure additional quota will send negative signals to the Industry as a whole, particularly the emerging deepwater play.

For the long term, the SCiN strategy is "more quota for Nigeria". SPDC is helping the Government to build a strong case for a larger share of OPEC quota to create space for Nigeria to produce, based on capacity buildup of real projects, supported by socio-economic considerations. The Government intends to go public with this case later this year, which may help SCiN secure more quota for forthcoming projects such as EA and Bonga and others, ahead of several major competitor projects.

Besides the above industry initiative, Shell may consider assisting the Nigerian Government in reviewing its oil and gas strategy in the light of various energy scenarios. The Group (PXG, ID) is assisting Mexico in this direction and a similar project could be done in Nigeria, if requested by the Nigerian Government. EP will need to review the overall Group exposure to OPEC producing countries and the place of Nigeria in this.

In both short term and long term strategies, SCiN will work with EP to ensure both full leverage of Group resources and influences and optimization of EP production globally.

3.2 Sustain adequate Government funding and reduce arrears

Insufficient budget and delayed NNPC response to cash calls (leading to arrears) caused major constraints to SPDC growth until 1998. Since then, SPDC has secured sufficient and substantially increased budget, assisted by effective lobbying. Alternative funding (AF) of Exploration and Appraisal, sole risk on shallow offshore, PSC funding for deepwater and escrow self-funding for NLNG have been successfully established and allowed unhindered development. However, since 1998, release of funds through the cash call mechanism has added to costs and, in some cases, delayed projects, and arrears have remained at high levels, putting pressure on borrowing limits. Arrears have developed for various reasons over the last few years, in some cases, lack of funds and timing of budget approvals by the Government, in other instances, NAPIMS/NNPC not approving the actual spend by SPDC on a timely basis.

Responses: SPDC needs to sustain its effective and continuous lobby approach to budget and arrears issues. Structural changes, already being discussed, also need to be followed through with NNPC and others to improve the cash call process and reduce arrears. SPDC has made significant progress in 2002 in securing NAPIMS approvals for expenditure, which it plans to take further to ensure that there are no internal reasons for arrears. SPDC is also working to secure agreement in 2002/2003 to a revised process, which will allow for sustained transparent and smooth release of agreed JV budgets, including arrears repayments.

As a contingency measure, new alternative funding mechanisms will need to be identified. SCiN will establish a specialist team based outside Nigeria to study new options and delivery strategies.

3.3 Effective deployment of sufficient executive capacity (resource the plans)

Major capability gaps have been identified and need to be bridged with urgency for both base business activities (particularly asset integrity) and the Growth Programme in terms of competencies and executive capacity. The Nigeria talent pipeline should be optimally allocated to all Shell entities in Nigeria (SPDC, SNEPCO, NLNG, etc.).

Responses: in the short-term, it is essential that more Group staff be urgently deployed in Nigeria (particularly for operations and maintenance activities). This, however, can only be a partial solution given the overall shortage in key technical skills across EP, the general reluctance of staff to work in Nigeria and the limited capacity for SPDC to absorb new staff. Alternative strategies are being pursued, including conducting more work overseas and getting more support from selected contractors. Increased organisational focus within SPDC is also needed as well as raising staff effectiveness through improved basic services.

A range of initiatives is being pursued, including a new centre for field development studies outside the Niger Delta and support from the new EP-Projects Group. These measures should help meet requirements, but effective implementation will be a major challenge requiring co-ordinated efforts from SCiN and across EP.

A small SPDC-EPG team will address the mechanisms for implementation of the recommendations of the SPDC Programme Development (Resourcing) Review and will produce an Integrated Plan by July 2002, including monitoring aspects. The team composition will be chosen to facilitate buy-in to the new concepts from the existing organisation in Nigeria.

3.4 Restore and maintain asset integrity

There is a backlog of maintenance activities following a period in the 1990's when funding was highly constrained. A combination of budget restriction, prioritisation and executive capacity still restricts the rate at which the backlog can be cleared.

Response: progress has been made including development of asset integrity and HSE management system, and projects initiated for pipeline replacement, and refurbishment of the Bonny Terminal. Steps now being pursued include the introduction of modern maintenance systems, sourcing of key Group staff and retraining of existing field staff, as well as the development of a stronger maintenance culture within the organisation.

3.5 Provide adequate security

The level of security in Nigeria is low, with increasing criminality and routine violence due to poverty and poor law enforcement, combined with regular ethnic, religious and cultural clashes.

Responses: SCiN has policies in place to provide a secure business environment while safeguarding Group reputation. It is improving its security management and the physical protection of its people and assets, with the support of Global Security. Federal and State Governments have also begun to accept responsibility for providing an investment friendly security environment. This remains an area of intense lobby effort. The profile of this topic will be raised further, including addressing it as an industry investment issue for Nigeria.

3.6 Continue transformation - Energise the workforce (inspired leadership)

Resourcing the business continues to be a major challenge, both in terms of filling vacancies and in developing competencies for the jobs. SPDC is not attractive to Group expatriates and is losing the race for scarce talent. The efficiency of staff is impacted due to shortcomings in support infrastructure. Union disruptions and inability to obtain the loyalty of some of our scare Nigerian resources is a concern. Winning the battle for the hearts and minds of staff, local and expatriate alike is key.

Response: an HR strategy addressing the key people issues is being introduced. It has so far resulted in starting to build relationships with the Unions as well as encouraging an improved sense of affiliation for staff with the company. Remuneration policy is to remain competitive in the top quartile of the upstream Nigerian industry while a performance recognition and management process to embed a performance culture has also been introduced. As the largest oil industry employer SCiN needs to be proactive in developing a strategy for remuneration in the oil industry, rather than being a follower of the smaller mainly US companies. Such a stance would be welcomed by Government to ensure that oil industry salaries are benchmarked within the economy and that inflation is controlled. Effort in future will also include the improvement of relations between Nigerian staff and their expatriate counterparts. In this light, a Diversity and Inclusiveness plan for SCiN is needed to ensure acceptable representation of gender; racial representation is already tracked.

The development of Nigerian talent continues with the overall objective of Nigeria becoming a net exporter of talent to the Group. This will further enhance Shell's reputation on capacity building and contribution to Local Content among its competitors in Nigeria

3.7 Hold recent gains and making further progress in SCiN's relationship with NNPC

NNPC is the key SCiN stakeholder. Apart from its interests in SDPC JV, NLNG and SNEPCO (as licensor) it exerts significant regulatory influence on a range of topics. In the past three years, relationships with NNPC have been dominated by the aftermath of the Value for Money (VFM) audit and subsequent claim ($2 billion, still unresolved). Relations in 1999/2000 became more difficult with the new NAPIMs playing a regulatory "watchdog" role. These have since improved but needs to be consolidated.

NNPC has a stated objective of becoming an operator in its own right on a par with, e.g., Petronas and Petrobras. Some competitors have taken NNPC as a joint operator partner in a few exploration licenses, hence the process is underway. This could undermine the relationship Shell-NNPC and lead to loss of influence.

Response: in addition to improving current engagement and processes, SCiN believes it should proactively support NNPC aspirations towards being an operator. SCiN will establish a team with EP to develop a structured framework including training, cross posting, secondment and developing IT networks for this purpose. The global reputation of Shell in this case will be a key facilitator of change.

SCiN is currently working on several joint industry initiatives with the Government and NNPC. These include improving structures and modalities for JV cash call/funding, improving local content, integration of industry NDDC/CD initiatives, and building a case for increased OPEC quota for Nigeria. A joint industry position has also been established on the desirability to roll over the 2000 MOU when it expires by end 2002 and, in due course, industry may work together on license extensions.

3.8 Protect and realise reserves

SPDC proved oil reserves are potentially exposed, as they were booked too early, assuming a timely delivery of the Growth Programme. If delivery is further delayed for any reason, some of the reserves could only be produced past the licence period, and therefore could not continue to be carried as proved reserves. As a protective move, EP decided to freeze the level of reserves in 2000. This booking moratorium is unlikely to be lifted in the near future, leading to persistent downward pressure on the Group Hydrocarbon Reserves Replacement Ratio. The proved gas reserves were not part of the moratorium, but now appear to be under similar pressure to be frozen in view of the lack of reasonable certainty that the gas volumes can be produced within the license period.

Response: if the Growth Programme is delivered on time, the risk of de-bookings can be postponed. Alternatively, portfolio actions need to be identified (e.g., peripheral fields) that may help release this tension on reserves. In the mean time, exploration spending is reduced to the absolute minimum required to meet contractual obligations. V00230716

Securing license extension beyond 2019 will also reduce exposure and may allow booking of new proven reserves as SPDC has continued to add impressive quantities of physical reserves. An EPG-SPDC team located outside of Nigeria will assess how to do so through, inter alia, divestment deals with NNPC. Dialogue with the Government on modalities of license extensions is ongoing in a low key manner, as it is understood that license extensions will be received "anyway" as long as commitment has been demonstrated.

It must be noted that major Shell's investments have not yet been leveraged to extend the licence extension or get more quota. Future major FIDs should be used for that purpose.

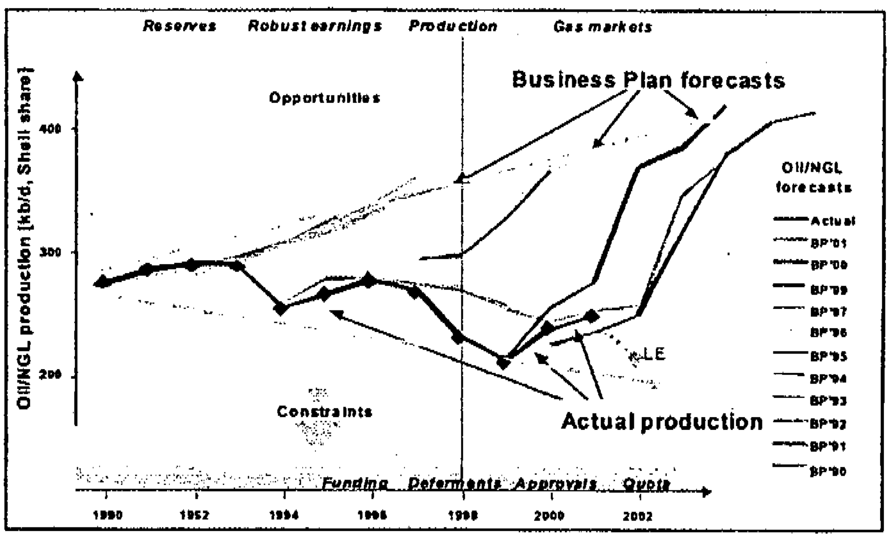
This issue is key to the Group and will also be addressed as part of the Global EP T& OE (Technical & Operational Excellence) project on Group Reserves.

3.9 Manage a long list of important issues

Another key challenge, unique to SCiN, is to have to simultaneously address – i.e., resolve or manage – a long list of important issues, as documented in Appendix 2. Each of these issues is significant on its own and must be addressed with continued effort and seriousness as **they have the ability to disrupt the plan.**

4. Realising Nigeria

Given the importance of Nigeria for the Group and the commitments already made for the Growth Programme, SCiN must deliver on its promises. There is no alternative, but to "realise Nigeria". However, history has shown that Shell's growth aspirations in Nigeria have rarely been met (see plot below) and future success cannot be taken for granted. New approaches and increased control are thus required, together with fallback positions in case delivery did not materialise as promised.



Oil production forecasts of a decade of consecutive SPDC Business Plans (various colours) against Actual production (dark blue).
It must be noted that the target has been exceeded in 2000 and 2001, but that due to OPEC quota the Actual is likely to be below Target for 2002.

V00230717

4.1 Governance

New Ways of Working – Nigeria is a significant element of the EP portfolio. Given the importance of the growth plans to the EP business and the challenges faced by the present organisations (SPDC in particular) a new approach to conducting Shell EP business in Nigeria is necessary. New ways of working will be introduced, drawing on the resources and capabilities of Global EP and supported by relevant structures and processes. As a first step, EPG and the SPDC MD will agree the new modus operandi, to be followed by the development of the appropriate governance model and implementation/communication plans.

Role of the Country Chair - Maintaining Shell's key positioning in Nigeria depends on many aspects including performance, SD, reputation, but most importantly effective co-ordination of Shell efforts and optimal relationships with key stakeholders.

In this environment, the Country Chair as Shell's Ambassador plays a key role to achieve the Group's aspirations. With the recent SCiN developments, the job has grown to be almost full-time and dedicated support is needed to both address the SCiN issues and to support the Country Chair. Some of these SCiN activities are presently carried out on a part time or double hatting basis by mainly SPDC staff. SCiN resourcing however needs to be addressed, considering the clear stretch on SPDC management capacity and the need for prioritisation and focus on delivery within SPDC.

ID will make a proposal for support by the Businesses who will fund these activities.

4.2 Delivering on Milestones

The recommendations of the Country Review must be implemented over the next 18 months as per milestones outlined below:

Milestones End 2002	Milestones Q3 2003
EP new modus operandi operational with new governance model in place	Targets of Growth Programme met on time
Resources review integrated plan implemented	All projects adequately resourced
OPEC quota secured for EA	FID's on all Trains 4/5 upstream projects taken
Asset inventory completed, status known, action plan to remedy agreed upon	Proven gas reserves of Trains 4/5 booked
Arrears below $400 million	FID's on deepwater projects taken (Bonga SW, key exploration)
Value for Money claim resolved	OPEC quota secured for Bonga and EA
Acceptable responses for risk profile developed	Implementation of the asset integrity restoration and maintenance plan on target
New structures and processes proposed by the Country Review in place and working	Arrears below $200 million (no non-approved NNPC work in this figure)
SCiN Diversity and Inclusiveness policy in place	Strategic options fully developed with implementation plans
Delivery on target, keep to realistic promises	Support Services Directorate in place and fulfilling staff and families' expectations
	Shell number one on Mori poll in Nigeria

4.3 Monitoring the Delivery

The coming 18 months are crucial to the success or failure of the Group's aspirations in Nigeria. Given the strategic importance of Nigeria to Shell, alignment of issue management among the Shell's stakeholders over these coming months is essential.

Given the major milestones of EA, Bonga, Nigeria elections, scenarios and OPEC/Quota developments, a Nigeria Steering Committee, consisting of the Nigeria Country Chair, RBDs and chaired by the RMD will be established. It will monitor delivery of growth plans and preparation of options in the event of non-delivery of growth as discussed in this Country Review.

4.4 Strategic Options

Options appear limited due to the commitments already made to the Growth Programme. Results of a preliminary investigation conducted as part of the Country Review are summarised below. Further in-depth work is recommended, to be lead by the Businesses working closely with SCiN's planning units.

Portfolio actions – Should the growth programme take place as planned, the Nigeria footprint for Shell in terms of capital employed and production will be like SEPCo and Expro today. It is uncertain how this will be perceived in the market place. A strategy must be developed to manage this footprint through portfolio actions, particularly for the onshore JV where the country risk is largest. SCiN has already prepared deepwater portfolio swap packages for possible use in Group's strategic asset swaps, and has studied options for peripheral acreage in the SPDC JV.

Employ internal flexibility – SCiN offers a diverse portfolio of linked activities, in principle enabling portfolio optimisation options to be developed. This already takes place to an extent between NLNG and SPDC, but a more deliberate strategy should be designed exploiting the different terms (e.g., deepwater versus onshore), shareholdings (e.g., shallow offshore versus onshore), crude quality (API) or feed gas (AG versus NAG).

Low cost holding options – Despite the high-predicted growth rate, other options exist to grow even faster, namely deepwater gas exploration and appraisal, regional projects (e.g., West African gas pipeline), domestic gas, etc. Actively pursuing them is currently not recommended, ***as all focus must be on timely delivery of the growth programme***, but they should be maintained as low cost holding options.

4.5 Review Q3 2003

A review will be conducted after the elections and before new major FIDs are taken to assess the business environment and confirm the ability of SCiN to deliver on its promises. If the uncertainty of the Growth Programme remains high and its doability is not proven – for external or internal reasons – Shell's strategy in Nigeria will be reviewed in the light of the above strategic options, and activities slowed and/or scaled down as appropriate.

Walter van de Vijver, MGDWV

30 May 2002

VIJVER 0719

V00230719

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Appendix 1

SCiN Key Performance Indicators

SCiN

Business	NIAT2001 $millions	ACE2001 $millions	ROACE2001	*NIAT2006 $millions*	*ACE2006 $millions*	*ROACE2006*
EP	405	1,930	16%	*855*	*4,660*	*20%*
GP	129	1,486	9%	*302*	*2,621*	*7%*
Other	36	80	44%			
Total	570	3,496	16%	*1,193*	*7,361*	*16%*

SPDC

SPDC 2001 KPI Shell share	*Result*	*% of EP*	*Rank in EP*
Oil (kb/d)	251	8%	4
Gas (mmscf/d)	219	2%	12
BOE (kboe/d)	288	8%	3
Proved reserves (mln boe)	3170	16%	1
NIAT ($mln)	405	5%	6
ACE ($mln)	946	4%	5
IBVc ($mln)	3300	8%	4

SNEPCO

SNEPCO 2001 KPI all figures Shell share	*Result*	*% of EP*	*Rank in EP*
Proved reserves (mln boe)	609	3%	11
ACE ($mln)	477	2%	12
IBVc ($mln)	1550	4%	9

NLNG

NLNG 2001 KPI all figures Shell share	*Result*	*% of GP*	*Rank in GP*
Gas (mmscf/d, T12)	150		
Contracted sales (Tcf, T1-5)	3.7		
NIAT ($mln)	123		
ACE ($mln)	1459	17%	
IBVc ($mln)			

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Appendix 2

SCiN Challenges Overview

	Must Do	Should Do	Others
Operational Excellence	• Develop and implement new approaches with Global EP • Resource the plans • Build local staff competencies • Strengthen executive capacity • Deliver major milestones on time(EA, Bonga) • Demonstrate producing to capacity • Develop acceptable responses for risk profile • Obtain quota for EA & Bonga • Start short-term OPEC/energy solutions initiative	• Be cost leader in Nigeria industry • Optimise the organisation • Improve SCiN control framework • Deliver acceptable infrastructure for staff • Deliver on improved IT/communication systems • Settle Reserves addition bonus • Prepare responses to scenarios • Allocation of scarce Nigerian talent within SCiN • Shell Nigeria Gas materiality	• Start new projects, T4/5 and T6 • Update Nigeria gas strategy
Funding	• Fix arrears, now at all time high • Ensure adequate budget cover		
Stakeholder Relations	• Address NNPC lack of trust • Continue transformation: energise the workforce (inspired leadership) • Attract, retain and grow local talent	• Assist NNPC aspirations and capacity • Partner with local acreage holders • Improve Expatriate attractiveness	• Prepare Response to competitors • Address Trade union issues
License to Operate	• Catch up on asset integrity, Ogoni and Shell reputation • Improve HSE • Provide adequate security • Deliver on SGBP • Protect reserves position • Manage community disturbances • Improve SPDC internal processes (SAP) Resolve Value for Money claim	• Redirect CD pressure from SCiN to NDDC • Move from CA[1] to CD • Improve image of SPDC operator role • Split out SPDC JV – Shell roles (conflict of interest) • Obtain access to Ogoni land • Increase Shell share of Nigeria OPEC quota limit Develop OPEC LT options	• Develop SCiN policy on HIV/AIDS • West African pipeline and reputational risk

VIJVER 0721

[1] CA: community assistance – CD: community development

From: Ward, Brian BJ SEPI-EPG
To: Okpere, Kisito O SNEPCO-SND; Haan, Ebbie E SEPI-EPG
CC: Mcfadden, Sean H SNEPCO-SNPE; Ogunnaike, Tunde A SNEPCO-SNPM; Birch, Roger R SNEPCO-SNAM; Leonard, Mark MS SIEP-EPT-D; Sears, Richard RA SIEP-EPT-DE; Agrawal, Arun A SNEPCO-SNCP; Van Der Lee, Jan-Willem A SNEPCO-SNAD; Van Den Berg, Ron M SPDC-MD; Haan, Ebbie E SEPI-EPG; Duhon, Chris C SIEP-EPG
BCC:
Sent Date: 2002-09-20 08:29:38.000
Received Date: 2002-09-20 08:31:37.000
Subject: RE: SNEPCO Reserves Audit
Attachments:

Kisito, thanks for the heads up. De-booking of reserves must be endorsed by myself and Excom before any action is taken. I, for one, am certainly not convinced that we cant use the Bosi argument on Erha - but need to look at it in detail. I would like you to help Ebbie Haan to prepare a note for discussion to Excom which puts the Group auditors view across followed by our own technical assessment of pros and cons.

Taking a hit on debooking in 2003 only to rebook 1 or 2 years later needs careful consideration.

Brian

-----Original Message-----
From: Okpere, Kisito O SNEPCO-SND
Sent: 20 September 2002 09:18
To: Haan, Ebbie SEPI-EPG
Cc: Mcfadden, Sean H SNEPCO-SNPE; Ogunnaike, Tunde A SNEPCO-SNPM; Ward, Brian SEPI-EPG; Birch, Roger R SNEPCO-SNAM; Leonard, Mark SIEP-EPT-D; Sears, Richard SIEP-EPT-DE; Agrawal, Arun A SNEPCO-SNCP; Van Der Lee, Jan-Willem A SNEPCO-SNCB; Van Den Berg, Ron
Subject: SNEPCO Reserves Audit

The SNEPCO reserves audit, conducted by an external auditor (Anton), was concluded last week in SDS. The official report will come later from the auditor but the following were the highlights:

* The auditor was impressed with the quality of the technical work done on the fields and our adherence to the 'proven area' calculations as required in the 2002 guidelines in the current numbers presented to him.
* He fully accepted that our booked figures were based on the old P85 methodology - according to the 'old'guidelines. He did not spend much time auditing them on the understanding we would update everything for the 1/1/2003 ARPR. This means de-booking reserves in Erha and Bonga.
* He did not feel that Bonga SW was technically or commercially mature enough for a booking

EXHIBIT
Ward 5
1/1007
GAIL F. SCHORR, C.S.R., C.R.R.

on 1/1/2003.
* Apparently, SEC frowns at the practice of linking remuneration through scorecard targets to proven reserves because it tends to encourage inflation of reserves (or asset value) without strict compliance to the SEC guidelines. I believe this is an action for SIEP to implement group-wide.
* The final audit conclusion was a 'satisfactory' rating. We could not get a good rating as the updates had still to be done. On the other hand we needed the audit to give legitimacy to the updates.

See below, more detailed comments by Sean McFadden on field-by-field basis:

ERHA
- Unfortunately Anton did not accept that we could offset Erha against Bosi due to the immature nature of Bosi and the fact that it has not even been appraised yet.
- He had a minor recommendation on the proved area in Erha to remove on unpenetrated fault block which lowered the proven reserves from 380 MMbo to around 350 MMbo. This left us about 80 (100%)MMbo short of our booked value
- Erha was the only field that he had a technical comment on. His conclusion was that the connectivity discounting was to not sufficient based on comparisons with the Bonga 690 and 803. We convinced him to accept it in the end after meetings with myself and Joshua Oletu although he was still uncomfortable with the high P/E ratio.

ABO
- He accepted not to change Abo as the wells in early next year, which are fully committed, will confirm the proved area.
- He had a minor recommendation on checking some areas in POOL-3 which may not be connected but this will have a small impact.

BONGA.
- After going through all the main reservoirs and IFO's - one by one he had only a few minor recommendations on proven areas which were implemented on the fly. He also accepted the probabilistic addition but the final number was still about 160 MMbo(100%) short of our booked value.
- We had one panic session on Thursday when he wanted to remove all of the IFO as it had not passed a VAR-3. Luckily I had a session in the morning on IFO plans with Dirk Andel in preparation for next week and we were are to use this material to convince Anton on Thursday afternoon just before the feedback session to leave in the IFO. The new story on the IFO is that VAR-3 would not be needed except for the NW area which needs new infrastructure in excess of $100 million. All of the penetrated bodies can be funded after var-2 as they can be hooked into existing infrastructure without major expenditure.
- He never really committed to accepting that we could offset Bonga reduction until we had drilled the IFO wells even if they were next year.

BONGA_SW
- The discussions onBongaSW took half a day instead of 2 hours.
- I also detected a level of discomfort within the project team with having BongaSW took half a day instead of 2 hours.
- I also detected a level of discomfort within the project team with having the do the VAR-3 in October (latest plan is November) as they will not be completely ready with all the Phase-2 models. There was a lot of debate about whether the models were necessary or not. If we want to guarantee success at VAR-3 then I feel they are necessary but not everyone agreed

as there are precedents of fields in the GOM which have passed VAR-3 with less. The driver for VAR-3 in 2002 appears to be now only to support a reserves booking which however the auditor has not supported .

The bottom line :

- We will get a very commendable 'satisfactory' rating due to the quality of technical work and our strict adherence to the new guidelines
- We will have to debook about around 240 MMbo at 1/1/2003

EP EXCOM
Minutes of meeting held in The Hague
18th October 2002

EP Excom Members Present

Walter van de Vijver, Chairman, Matthias Bichsel, Lorin Brass, Frank Coopman, John Darley, Carol Dubnicki, Dominique Gardy, Din Megat, Bob Sprague and Brian Ward.

Curtis Frasier attended as Secretary.

1. Business Plan 2002

Walter van de Vijver updated the Excom on the progress of the 2002 Plan following meetings with CMD earlier in the week. He said that the present draft of the 2002 Group Plan indicated a 12% ROACE at reference conditions. The CMD was looking for a final Plan that would include $3 bln in divestments, result in a gearing level of approximately 25% and include capital investments of some $12 bln (he noted, however, that the businesses had submitted Plans identifying $12.8 bln in investments). ROACE and proposed investment levels were shown for the various business segments.

Turning to the EP Business Plan for 2002, Walter compared and contrasted recent Actual ROACE and the 2001 Plan with the LE and current 2002 Plan – noting the significant downward shift. He then reviewed production growth, reserves replacement and unit operating cost – all of which are challenged, and showed the Excom the performance figures required to close the gap between the Plan and promised performance.

Walter told the Excom that he had withdrawn the Group Budget Proposal for the North America Campus from the CMD Agenda. As a non revenue-generating investment, it was not consistent with the current pressure on spending. This was considered a deferment, not a cancellation, and will require thoughtful communication. In the interim, options for restructuring the financing of the project should be investigated. **Action: Darley, Coopman**

Walter concluded by reviewing some potential means of addressing the challenges posed by the Plan. He tabled a list of Action Items and Excom Member Involvement required prior to the Excom/CEOs meeting scheduled for 28th October. Excom Members should provide their information directly to Lorin Brass by the close of business on Friday, 25th October. **Action: All**

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EXHIBIT
Ward 6
1/10/07
GAIL F. SCHORR, C.S.R., C.R.R.

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2. EP - The Road Forward

Walter introduced the challenge of the road forward for EP. He described: (i) setting the challenge to take the risks necessary to "get out of the box", (ii) making connection between our past and our future, (iii) integrating and managing the changes, and (iv) getting a sense of our own alignment. He cautioned that the way of thinking that got us here is still alive today.

The 3-Ps (portfolio, performance and people) are an established and well-known part of the EP vision and strategy. The road forward would have its own 3-Ps: the Pain, the Path and the Prize. Walter reviewed these in the context of history, business choices and response to external realities. He acknowledged that some changes were already underway, but a great challenge remained.

3. People on the Path Forward

Carol reviewed the people and organisation decisions to be addressed, along with proposed milestones and a timeline.

Following discussion, the Excom agreed:

- The "stage 1" impact was needed for presentation to MDC on 12th November.
- EP Strategy & Planning will report directly to the CEO, not through NBD.
- Regional NBDs will have a direct reporting line to NBD (with arrangements as to how this will work in EPM to be further agreed by Din and Loren).

4. The EP Globalisation Project

John Bell reviewed the proposed allocation of $500 mln in savings targets across EP. He noted that these savings represented only 13-20% savings in expenses over a period of 5 years. The numbers allocated were based on high-level benchmarking with further refinement to come from execution of the Project. Although this allocation totaled $500 mln, actual savings were expected to be in the range of $5–800 mln.

The process and procedures for progressing the project were discussed. Walter noted that the appointment of a Team Leader would be a subject for the MDC meeting on 12th November.

All agreed that an effective communication plan would be essential.

5. **EP Europe Project – Progress Report**

Brian Ward presented a report on the progress of the EP Europe Project, describing the key deliverables and project management structure. He told the Excom that the team was focusing on 10 major activities, and reviewed each in the context of the Project timeline.

Brian told the Excom that the desired characteristics of a new EP Europe included: (i) one business organization, (ii) flexible and highly compatible, (iii) recognized leader in HSE and rapid deployment of best practices, (iv) partner and employer of first choice, (v) continuous improvements, (vi) high in challenge and support, (vii) strong "interface" with Shell Energy, and (viii) focused exploration effort.

Next, the vision and targets were reviewed. Brian told the Excom that the objective was to create "the next generation of EP company". He reported that a significant prize was already beginning to be identified.

- The Excom emphasized that any "local" initiatives, such as this, must be conducted and executed in a manner which ensures Global alignment.
- It was noted that an "Enterprise mind-set" (top-down approach to execution) would be the most effective in these circumstances.
- Effective engagement with stakeholders regarding both people and location issues was critical.
- A communication strategy that can deliver a clear and compelling story will be essential.

6. **A Winning Story**

Brian Ward presented an initial outline for the communication package.

- The Excom noted the need to have the information reviewed carefully by IR prior to any broad distribution. **Action: Coopman**
- While it was felt that numbers help to make the story feel real and provide a tangible target, the use forward-looking goals to establish a "stake in the ground" would be preferred to expressing it in terms of "gaps".
- It would be useful if the benefits to government stakeholders could be explicitly included.
- High quality graphics should be developed and included.
- Development of foreseeable Q's and A's should begin immediately.
- The final product will need a dedicated professional effort.
- For presentation to the Excom/CEOs meeting scheduled for 28th October, it will be sufficient to revise the existing work. **Action: Ward**

REDACTED

EXHIBIT
Ward 7
1/10/07
GAIL F. SCHORR, C.S.R., C.R.R.

Unknown

From: Ward, Brian BJ SEPI-EPG
Sent: 13 November 2002 02:36
To: Turner, Bob RHS SIEP-EPGO-P
Subject: RE: Effect of Min. standard on Production Forecasting

OK thanks

-----Original Message-----
From: Turner, Bob RHS SIEP-EPGO-P
Sent: 11 November 2002 13:46
To: Ward, Brian BJ SEPI-EPG
Cc: Clubb, Mike M SIEP-EPGO-P; Helmer, Thomas TOM SIEP-EPGO-P
Subject: RE: Effect of Min. standard on Production Forecasting

If you mean that the current (growth) targets we are working towards are a stretch then yes, that is what I hear. The other comment that goes hand in hand with it is that 3% growth is only sustainable if you have something like 120% reserves replacement.

In the standard I have avoided all non precise descriptions like Production Target, promise, stretch etc. The issue for us on a corporate level will be what forecasts do we want to promise the outside world? If we take the 50 / 50 then we will only deliver it 50% of the time ... is that acceptable?

When I get back I'll start work with the EPB boys to see how we want to handle this.

Regards.

Bob.

-----Original Message-----
From: Ward, Brian BJ SEPI-EPG
Sent: 09 November 2002 20:06
To: Turner, Bob RHS SIEP-EPGO-P
Cc: Clubb, Mike M SIEP-EPGO-P; Helmer, Thomas TOM SIEP-EPGO-P
Subject: RE: Effect of Min. standard on Production Forecasting

BY your last sentence I presume you mean that the 50/50 is really a 10/90?

Brian

> -----Original Message-----
> **From:** Turner, Bob RHS SIEP-EPGO-P
> **Sent:** 29 October 2002 03:15
> **To:** Ward, Brian BJ SEPI-EPG
> **Cc:** Clubb, Mike M SIEP-EPGO-P; Helmer, Thomas TOM SIEP-EPGO-P
> **Subject:** Effect of Min. standard on Production Forecasting
>
> Brian,
> Some early warning
> From the feedback and global discussion I'm getting I believe
> the Production Forecasting min. standard could be a 9.0 on
> the Richter scale. Its becoming clear that:
>
> * There is a lot of "hope" (= management adjustment) in our
> current forecasts round the group
> * No one seems to "own" the 3% growth target at the
> production end of the business
> * Upside potential is overestimated and downside risk underplayed
>
> It is quite possible that when we add all the 50/50 forecasts
> that we get a surprise (and I don't mean a pleasant one) ...

> but the good news is at least we will have a credible
> starting point ..... if we choose to use it (which is
> something we don't have at the minute).
>
> The main message we need to send out now is that 50/50
> forecasting is not an opportunity to get back to taking a
> wrap around the arm.
>
> Regards.
>
> Bob
>
> Bob Turner
> EP Discipline Head. Subsurface Production and Fluids Engineering
> Shell International Exploration and Production B.V.
> Volmerlaan 8, Postbus 60, 2280 AB Rijswijk, The Netherlands
>
> **Tel:** +31 70311 2861 **Fax:** +31 70311 2085 **Other Tel:** +31 611047890
> **Email:** Bob.Turner@shell.com
> **Internet:** http://www.shell.com/eandp-en
>

Coopman, Frank F SIEP-EPF

From:	Van De Vijver, Walter SI-MGDWV
Sent:	31 January 2003 11:24
To:	Chapman, Jim JW SIEP-EPGO-H
Cc:	Coopman, Frank F SIEP-EPF; Pay, John JR SIEP-EPB-P; Brass, Lorin LL SIEP-EPB; Darley, John J SIEP-EPT; Freeman, Karyn KL SIEP-EP-EA; Ward, Brian BJ SEPI-EPG
Subject:	Change Magazine- RRR
Importance:	High

Jim,

I am totally shocked and amazed to learn about the article " drawing on credit".
Knowing the sensitivity on our reserves base and formal reporting guidelines,how could you have contributed to such an article in a magazine that also gets distributed externally?!
As senior reservoir engineer in the T& OE leadership it is even more surprising.
The article is totally unfit for external circulation.

As an aside,we need to dramatically improve the formal control around the publication of this magazine (if we want to continue it,somehow
I do not see them anyway) through EA and Finance.

Regards,
Walter

Walter van de Vijver
EP CEO and Group Managing Director
Shell International B.V.
PO Box 162, 2501 AN The Hague, The Netherlands

Tel: +3170377 7427 **Fax:** 2555 **Other Tel:** +3170377 1675
Email: Walter.W.VanDeVijver@si.shell.com
Internet: http://www.shell.com

EXHIBIT
Ward 8
1/10/07
GAIL F. SCHORR, C.S.R., C.R.R.

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RJW00190173

Unknown

From: Ward, Brian BJ SEPI-EPG
Sent: 03 February 2003 10:25
To: Darley, John J SIEP-EPT
Subject: RE: Jim Chapman

You said it John, technical content! I take your point however. (so much for openess by the way!).

-----Original Message-----
From: Darley, John J SIEP-EPT
Sent: 03 February 2003 18:40
To: Ward, Brian BJ SEPI-EPG
Subject: RE: Jim Chapman

Brian,

In my view there are two issues here. One is on disclosure of share-price sensitive data - and I can perhaps understand that Jim was not aware of such sensitivities (but he does hold a senior role in the EP technical organisation) - but he other is the general pitch of the article. To make such statements as "In the past there was perhaps too much of a short term focus ....", "withouit looking at how to fill the gaps" are hardly a strong advertisement for our role as a long term player giving full attention to optimising the development of resources. I find it very difficult to understand why Jim felt such quotes to be appropriate in an external publication.

For your info, I have given instructions not to continue distribution of the magazine and to recover and destroy all distributed copies.

I have also asked for procedures to be developed to ensure proper formal authorisation of future issues (including IR, External Affairs etc), but I must admit that I would normally have looked to discipline experts in T&OE as the final arbiters of technical content ???

John

-----Original Message-----
From: Ward, Brian BJ SEPI-EPG
Sent: 03 February 2003 17:50
To: Van De Vijver, Walter SI-MGDWV
Cc: Darley, John J SIEP-EPT
Subject: Jim Chapman

Had a word with Jim. This whole thing came up months ago under the auspices of "Why T&OE?" Jim, being the head honcho for Petroleum Engineering recited the issues arount the box - the key one being - from his viewpoint - reserves replacement. It was absolutely clear he had NO IDEA as to the sensitivities around disclosure .(And to be fair to him the latter has been building up significantly over the last year.) , and was merely trying to egg the troops on to greater things

I have explained the "rules of the game" regarding share sensitive information and will share in general with T&OE.

In the meantime Jim has received a severe jolt and will certainly not make the same mistake again.

Brian

Brian J Ward
EPG
Shell International Exploration and Production B.V.
Carel van Bylandtlaan 30, Postbus 663, 2501 CR The Hague, The Netherlands

Tel: +31 70 377 2390

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DB 01685

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EXHIBIT
Ward 9
1/1/07
GAIL F. SCHORR, C.S.R./C.R.R.

Email: Brian.Ward@shell.com
Internet: http://www.shell.com/eandp-en

—
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

Darley, John J SIEP-EPT

From:	Ward, Brian BJ SEPI-EPG
Sent:	02 December 2003 08:47
To:	Coopman, Frank F SIEP-EPF; Brass, Lorin LL SIEP-EPB; Darley, John J SIEP-EPT
Cc:	Van Went, Renee R SEPI-EPG
Subject:	RE: proved reserves
Importance:	High
Sensitivity:	Confidential

Frank minor typos in blue. The amount of reserves to be "firmed up" in Nigeria during 2004 (estimated 42 man years effort!!) is substantial. The 42 man years attacks 580 mmbbls reserves. Of that 580 it is already estimated that 140 mm bbls will be so far in the future it wont qualify. They are then proposing a discount factor of 80% to the remainder (0.8* 440)=352. Thus we can sort of put our hand on our hearts technically and add back 352 mmbbls. However these numbers change every day as work progresses. My feeling would be to take the full hit in January 2004 (circa 1.5 bn bbls = immature + exposed = 814+720 mmbbls) and start rebooking end year. Otherwise we are yet again exposed especiaaly should the SEC decide to review during 2004). It also makes a nice twist to the story - quote " work will be done to bring reserves up to SEC regulations during 2004 and we would expect to start rebooking later during the year." unquote

Brian

Script for Walter on the prove...

-----Original Message-----

From:	Coopman, Frank F SIEP-EPF
Sent:	02 December 2003 07:56
To:	Ward, Brian BJ SEPI-EPG; Brass, Lorin LL SIEP-EPB
Subject:	proved reserves

Please do not copy or forward this note.
<< File: Script for Walter on the proved reserves position.doc (Compressed) >>
No feedback as yet except from Judy (not happy).

Frank Coopman
Chief Financial Officer for EP
Shell International Exploration and Production B.V.
PO Box 60, 2280 AB Rijswijk ZH, The Netherlands

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DB 10102

EXHIBIT
Ward 10
1/10/07
GAIL F. SCHORR, C.S.R., C.R.R.

V00160446

Script for Walter on the proved reserves position

Facts

1. Recent (October –November) audit reports and completion of reserves studies concerning the proved reserves positions as per year end 2002 for SPDC and PDO Oman tell us that the 31/12/02 proved reserves for those companies were overstated by approximately 1.3 bln boe.

2. Correspondence with the SEC in 2003 (last letter received in September) on the topic of the LKH issue leaves us with the message from the SEC to de-book the volumes below the Lowest Known Hydrocarbon logged. These volumes are estimated to be approximately 300 mln boe.

3. The proved reserves bookings as filed in the 2002 20F included a number of items which, while in compliance with our own guidelines at that time, were possibly at odds with the strictest possible interpretation of the SEC guidelines. It was decided to leave them as, in aggregate, they were regarded as immaterial in relation to our total proved reserves position. The largest single position was Gorgon (557 mln boe). All others added up to less than 200 mln boe.

Consistency with previous presentations

The position described above is consistent with an October presentation to the GAC and a related NFI to CMD. What is new are the items under point 1 above, which became known only very recently.

Materiality

With the SPDC and PDO Oman volumes, the total volume not in compliance with SEC guidelines in the proved reserves filing in the 20F as per 31/12/02 has become significant (2.1 bln boe or 11% of the Group's total proved reserves).

The materiality test is whether the total change in reported reserves would be viewed by a reasonable investor as having significantly altered the total investment information available. Applying that parameter, the absolute quantity and the percentage is material.

If a de-booking or restatement was considered, the financial impact thereof is very limited (approximately 40 mln dollars after tax in 2003) and not material in Group (or EP) terms. This is because virtually all volumes to be adjusted are registered as proved undeveloped reserves – this category only rarely drives DD&A.

There is no effect on existing or past reserve addition bonus schemes (in Oman and Nigeria).

DB 10103

Completeness

If we were to de-book /restate points 1 – 3 above, would we then be in full compliance with the SEC guidelines?

There is a possible issue around our Kashagan reserves (380 mln boe). Total is being challenged right now by the SEC to de-book on the grounds of the absence of a government approved development plan.

Both PDO Oman and SPDC will have to further mature field development plans in 2004 to be fully compliant and avoid further adjustments.

Fuel and Flare

All major competitors include fuel and incidental flare in proved gas reserves, with the exception of BP who report on the same "as sold" basis as Shell.

Including fuel and flare would result in approximately 300 mln boe additional reserves as reported at 31.12.2002. However, implementation is not as straightforward as it would at first appear. Inclusion of fuel and flare requires a corresponding Opex charge to be made (at fair market value of the gas consumed), offset by a revenue entry. Consequently, including fuel and flare in any restatement of historically disclosed reserves would also require changes to several financial report line items. Whilst feasible, this would be a major undertaking requiring dedicated study work on the part of every operating company that disclosed production in recent years.

Therefore, it is recommended not to include fuel and flare in the restatement.

Legal Consequences and Required Steps

If and from the time onwards that it is accepted or acknowledged by the management of the issuers (Royal Dutch and STT) that, when applying the SEC rules, the 2002 proved reserves as reported in the Form 20-F are materially wrong, the issuers are under a legal obligation to disclose that information to all investors at the same time and without delay. Not to disclose it would constitute a violation of US securities law and the multiple listing requirements. It would also increase any potential exposure to liability within and outside the US. Note that the reserves information also appears in the non 20-F Annual Reports.

Disclosure cannot await the next Form 20-F 2003 appearing in April 2004. With respect to the 2002 Form 20-F there are two possible approaches to address the previously reported reserves: (i) a stock exchange release stating the key issues on reserves restatement followed by a filing of a restated 2002 Form 20-F as soon as possible thereafter or (ii) the same stock exchange release with the added message that the changes will be reflected in the 2003 Form 20-F and no filing of a restated 2002 Form 20-F. The preference is for the more robust approach in i) as the SEC is likely to request for a restated 2002 Form 20-F and the reliance by investors on an uncorrected 2002 Form 20-F remains an issue.

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A significant number of additional measures will be required around a restatement of the 2002 Form 20-F and the previous dissemination of incorrect proved reserves data on Group websites and in other publications. Sox 302 re-certification, Form 6 K filing, consultation with external auditors, communication with the SEC, briefing for analysts etc.

<u>IR issues</u>

The announcement of restating or de-booking the reserves will be a significant negative IR event. We will point out that we did not lose any significant hydrocarbon volumes, as this is basically a re-classification. Our expectation estimate of the total volume of resources will be largely unaffected. Our own strict rules and governance triggered this adjustment. The LKH issue remains controversial in the industry (but rules are rules, etc). The Gorgon development decision is getting closer, as the recent bi –lateral declaration of intent demonstrated.

Frank Coopman
John Pay

1 December 2003

DB 10105

STOUP

Expectation Reserve

↳ Proven: Based on project set – List of projects "Proved Compliant" SEC

'Not proved compliant'

De-booking volumes
↳ expectation
↳ range for recovery
↳ when come back – FID?

Project data set with Richard Waterland.

Clayton

PDO proven reserves: no serious look
data base is disarray
conservative is old PRS.

> List of projects (large assets) – exposure 200 mmbbl. Shell share
– first pass

"Don't de-book if have a plan"

Saturday am.

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