

ALASKA OIL AND GAS CONSERVATION COMMISSION

Before Commissioners: Daniel T. Seamount, Chair
Cathy Foerster
John K. Norman

In the Matter of Whether Changes or)
Additions may be Needed to the)
Commission's Regulations Governing)
Drilling, Rig Workover and Well)
Control in Offshore and Ultra)
Extended Reach Wells Drilled in)
Areas of the State of Alaska Under)
the Commission's Jurisdiction.)
_____)

Docket No.: OTH-10-16

ALASKA OIL and GAS CONSERVATION COMMISSION
Anchorage, Alaska

September 15, 2011
9:00 o'clock a.m.

VOLUME I
PUBLIC HEARING

BEFORE: Daniel T. Seamount, Chair
Cathy Foerster, Commissioner
John K. Norman, Commissioner

TABLE OF CONTENTS

Opening remarks by Chair Seamount	03
Opening remarks by Commissioner Norman	06
Opening remarks by Commissioner Foerster	08
Presentation by Elmer Danenberger	10
Presentation by Melinda Taylor	61
Presentation by Mike Munger, RCAC	100
Presentation by Dr. Mike Myers, UAF	108
Presentation by Harold Shepherd, KBCS	151
Presentation by Lois Epstein, Wilderness Society	165
Presentation by Kara Moriarty, AOGA	193

EXHIBITS ADMITTED:

BOEMRE report	06
Det Norske Veritas Addendum to Final Report	06
Comments from the North Slope Borough	57
Comments from AOGA	57
Comments from ConocoPhillips	57
Comments from DNR	57
Letter from Kachemak Bay Conservation Society	57
Comments from Kachemak Bay Conservation Society	162
Paper by Lois Epstein, P.E.	180

1 PROCEEDINGS

2 (On record - 9:02 a.m.)

3 CHAIR SEAMOUNT: I'd like to call this hearing to order.

4 Today is Thursday, September 15th, 2011, it's 9:02 a.m. We're
5 located at 333 West Seventh Avenue, Suite 100, Anchorage,
6 Alaska. Those are the offices of the Alaska Oil & Gas
7 Conservation Commission.

8 I'd like to start out by introducing the bench. To my
9 right is Commissioner John Norman, to my left is Commissioner
10 Cathy Foerster, our Engineering Commissioner. I'm Dan
11 Seamount, the Geology Commissioner and Chair.

12 If anyone has any special needs please see our Special
13 Assistant, Jody Colombie, or Samantha Fisher, they're raising
14 their hands right now, and they'll accommodate you.

15 R & R Court Reporting will be recording the proceedings.
16 You can get a copy of the transcript from R & R Court Reporting
17 and go ahead and call Ms. Colombie and she can lead you to the
18 right source.

19 We'd like to remind those that are testifying to speak
20 into the microphones so that persons to the rear of the room
21 can hear and so the court reporter can get a clear recording.
22 Also please stay focused on the issue at hand, we've got a
23 really tight agenda here so we would like to keep on schedule.

24 The issue at hand in this matter is Docket No. OTH-10-16.
25 That is an inquiry into whether changes or additions may be

1 needed to the AOGCC's regulations governing drilling, rig
2 workover, and well control in offshore and ultra-extended reach
3 wells drilled in areas of the state of Alaska and under the
4 AOGCC's jurisdiction. In other words this inquiry is for
5 purposes of potential rulemaking. It's a very serious matter,
6 we don't want another Deepwater Horizon, Macondo type incident,
7 tragedy to ever occur within Alaska. And we're going to take
8 all testimony very seriously.

9 A little bit of history of these proceedings. Notice of
10 this inquiry was first published in the Journal of Commerce,
11 the Juneau Empire, the Fairbanks News-Miner, the Arctic
12 Sounder, the Mat-Su Valley Frontiersman, Peninsula Clarion and
13 the Anchorage Daily News, as well as the State of Alaska online
14 notices and the AOGCC website between the dates of June 25th,
15 2010 and July 4th, 2010. It basically stated that following
16 the issuance of the report to the President from the National
17 Commission on the BP Deepwater Horizon Oilspill and Offshore
18 Drilling that we would convene a hearing, a public hearing, to
19 review and assess Alaska's relevant statutes and regulations.
20 This national report was issued on January 11th, 2011. The
21 AOGCC then gave notice of intent on February 13th, 2011 in the
22 Journal of Commerce as well as the State of Alaska online
23 notices and the AOGCC website to convene a public hearing on
24 this inquiry on May 11th, 2010 [sic]. However the Bureau of
25 Ocean Energy Management Regulation & Enforcement along with the

1 U.S. Coast Guard formed a joint investigation team to conduct
2 its own study. And they received an extension of time until
3 July 27th, 2011 to submit the final report. And because the
4 AOGCC believed that it would benefit from having the final
5 report from the joint investigation team the hearing -- the May
6 11th hearing was vacated and rescheduled for today.

7 When the joint investigation team report was again delayed
8 the Commission decided to hold the hearing while recognizing
9 that after the report was completed and interested parties had
10 a chance to digest its findings, we may take a recess after
11 tomorrow afternoon so that interested parties could digest the
12 report. Well, as it turns out that report, the BOEMRE report
13 regarding the causes of the April 20th, 2010 Macondo Well
14 Blowout, Volume II, was posted yesterday, this week. And I
15 would like to introduce it into the record if I have a motion.

16 COMMISSIONER NORMAN: Move to -- move to introduce the
17 most recent joint investigation team report into the record.

18 COMMISSIONER FOERSTER: Second.

19 CHAIR SEAMOUNT: And all those -- anybody opposed?

20 (No opposing votes)

21 CHAIR SEAMOUNT: Hearing none -- do we have a copy of that
22 report?

23 COMMISSIONER NORMAN: We do have a copy, I don't know that
24 we have it here on the bench, but we have a.....

25 MS. COLOMBIE: I'll retrieve it.

1 CHAIR SEAMOUNT: Okay.

2 COMMISSIONER NORMAN:we have a copy of it.

3 CHAIR SEAMOUNT: Well, then so moved the BOEMRE report
4 regarding the causes of the April 20th, 2010 Macondo Well
5 Blowout, Volume II, including appendices and cover memo from
6 Admiral Haft and Director Robwich which was posted on September
7 14th, 2011 containing -- consisting of 212 pages is hereby
8 entered into the record.

9 Also I would like to introduce into the record the -- that
10 Det Norske Veritas, I hope I pronounced that right, it's
11 Norwegian, Addendum to Final Report published on April 30th,
12 2011 consisting of 30 pages. Do I hear a motion?

13 COMMISSIONER FOERSTER: I move that we enter that
14 Norwegian report into the record.

15 COMMISSIONER NORMAN: Second.

16 CHAIR SEAMOUNT: Any opposed.

17 (No opposing votes)

18 CHAIR SEAMOUNT: Hearing none, the Det Norske Veritas
19 Addendum to Final Report published on April 30th, 2011 is
20 entered into the record. This will bring the number of reports
21 in the record to 54. It's quite voluminous.

22 Public comments were submitted by Department of Natural
23 Resources, Division of Oil & Gas, ConocoPhillips, North Slope
24 Borough, Kachemak Bay Conservation Society and the Alaska Oil &
25 Gas Association.

1 As I said before this hearing has been noticed and is
2 being held in accordance with 20 AAC 25.540 of the Alaska
3 Administration Code. Those are regulations governing public
4 hearings.

5 Before we get into it if anyone in the audience has any
6 questions of a person testifying, the way to get that is to
7 write your name, submit the written question to Ms. Colombie or
8 Ms. Fisher and she will forward them on to the Commission.

9 Commissioner Norman, do you have any opening remarks?

10 COMMISSIONER NORMAN: Thank you, Commissioner Seamount.
11 Only that we're moving forward with this inquiry because we
12 believe that the people of Alaska expect us to continually see
13 what we can learn from events elsewhere. The -- there are
14 certain areas within areas of responsibility of the Commission
15 -- the Commission's jurisdiction and so we will all get most
16 benefit out of this hearing if we can stay as focused as
17 possible on the areas that are within the jurisdiction of the
18 Commission. By way of example there are areas such as
19 decisions to lease in certain areas that are not within the
20 purview of the Commission. Once that decision has been made
21 and a landowner which most often would be the State of Alaska,
22 Department of Natural Resources, then it is the responsibility
23 of this Commission to exercise oversight and make sure that the
24 drilling and completion proceeds in accordance with sound
25 science and good engineering principles.

1 I wanted to note, Commissioner Seamount, that as we are
2 here today there is across the border our neighbors in Canada,
3 there is a hearing being conducted right now in Inuvik by the
4 National Energy Board of Canada. We have been in contact with
5 them exchanging information, they're very interested in these
6 proceedings and I would expect we'll be reviewing this
7 transcript and conversely we're interested in their
8 proceedings, any findings, any conclusions and any rulemaking
9 that comes out of that. They have published a list of specific
10 questions in areas of inquiry. If any of you are interested in
11 the -- in this forum being conducted right now by the National
12 Energy Board of Canada you could let the Commission's Special
13 Assistant know and she will get you a copy of the Canadian
14 questions.

15 CHAIR SEAMOUNT: Thank you, Commissioner Norman.
16 Commissioner Foerster, do you have any opening remarks?

17 COMMISSIONER FOERSTER: Yes, I do. First I want to thank
18 everyone who has come today for your interest and your
19 participation in this hearing. This is a very serious matter
20 as Commissioner Seamount said. The events that resulted in
21 this hearing were tragic. One injury of an individual
22 working is bad, but multiple death as were experienced in the
23 Gulf of Mexico is just a tragedy. We're here to ensure that
24 AOGCC's regulations have no gaps and are adequate for offshore
25 and ultra-extended reach drilling so we hope that everyone here

1 focuses on that goal. We're not here to listen to impassioned
2 speeches about why oil companies are good or bad so I urge you
3 not to waste anyone's time with what is more appropriately
4 vetted at another time. This is the time and place to address
5 the questions that were listed on the docket with respect to
6 our offshore and ultra-extended reach drilling and we're
7 anxious to hear the good comments that we expect from all of
8 you here today.

9 That's all.

10 CHAIR SEAMOUNT: Thank you, Commissioner Foerster. Okay.
11 I'm looking at the sign-in sheet and there's a number of people
12 who are going to be testifying today. I'd like to ask that
13 anyone representing an organization or institution who is not
14 on the agenda yet that wants to testify and has traveled from
15 outside Alaska or outside the Anchorage area please let Ms.
16 Colombie or Ms. Fisher know so that we can fit you in so that
17 if we do have to continue this hearing you don't have to come
18 back and we put you in at the end of testimony tomorrow.

19 For all those testifying please identify yourself and
20 indicate your experience, interest and/or qualifications in
21 this matter for the record.

22 So let's get on with the agenda and we're five minutes
23 ahead so that's good. First up on the agenda, I'd like to
24 recognize Elmer Danenberger who was especially invited because
25 of his experience in this kind of -- in these kinds of matters.

1 Welcome, Mr. Danenberger.

2 MR. DANENBERGER: Thank you. I am Elmer Peter
3 Danenberger, III, I'm commonly known as Bud, from Reston,
4 Virginia which is outside the beltway, but still close enough
5 to Washington to feel the aura. It can affect my judgment, I
6 think, on occasion, but happy to be here. Before I retired in
7 January of 2010 just shortly before the blowout, I worked the
8 Minerals Management Service. Since retirement I've been
9 working as a consultant which means I suddenly got an awful lot
10 smarter. But I worked 38 years with the Department of
11 Interior's offshore oil and gas program with duty stations in
12 two districts' headquarters and three of the four regions. The
13 only region I didn't have a permanent duty station was this
14 one, Alaska, unfortunately, but I did closely follow Alaska
15 activities from my positions in headquarters elsewhere. I was
16 up here on a number of details, I was involved in the
17 inspection of the first Cam-R explorer rig that operated for
18 Dom Petroleum (ph) in the Canadian Beaufort, I was out on the
19 Kulik at Kuhoon (ph), so on the ice island -- year round ice
20 island experiment in the Beaufort in the '70s, that didn't
21 really work out too well. And I, of course, was up on the
22 Slope a number of times, Endicott, Prudhoe.

23 Over my career I've had the opportunity to work with some
24 of your engineers and I say without hesitation that they're
25 among the best in the business and by that I mean best in

1 government and industry. So you should be very proud of that.

2 CHAIR SEAMOUNT: We are.

3 MR. DANENBERGER: I've also been very impressed with just
4 the short time I've been preparing for this meeting with your
5 administrative people, Jody and Tracie, extremely helpful and
6 timely. As a consultant you get a window into companies and
7 organizations through the administrative people and that's very
8 important so thank you.

9 I've also been impressed by you in that it seems that
10 you're hands on Commissioners, you're involved in the day to
11 day operations of the program. So I'm impressed by that. I
12 also noted when I looked at your website that I didn't see your
13 pictures or your quotes all over the place so I don't think you
14 know how to do this commissioner thing right, in Washington
15 they do it a lot different. But it's good.

16 CHAIR SEAMOUNT: We try to stay incognito.

17 MR. DANENBERGER: But I don't guess that any of you grew
18 up thinking you were going to be regulators or wanting to be
19 regulators. I know you never go to a cocktail party and hear a
20 boastful parent saying gee, my kid is really smart, no doubt
21 that he or she is going to grow up to be a great regulator, I
22 mean, just doesn't happen. But the way we regulate is
23 absolutely critical to our economy especially in this business
24 and resource development, we can either add value by
25 facilitating development of resources that are important to our

1 economy or we can actually make things riskier and more
2 dangerous through regulation while at the same time posing a
3 drag on the economy. So I want to talk about regulation in
4 general, philosophically and policy wise, then I also want to
5 address the specific issues that you raised in your present --
6 in your announcement.

7 Before we get rolling I need for everybody to read this
8 short disclaimer. It's a little bit exaggerated, but I've seen
9 them almost as bad in the beginning of presentations and
10 sometimes even attached to emails. But there's two points that
11 I want to make here first and obviously the views that I
12 express are mine alone and don't represent those of any former
13 or present or future employer. And the second point is that in
14 a society like ours that is so litigious where we have
15 disclaimers like this, how does that affect the safety culture.
16 Certainly a lot more difficult because in the energy field
17 there's always this undercurrent of tension, the advocates, the
18 opponents, no matter where you're located as a regulator it's
19 something that's always swirling around you. And unfortunately
20 also it's affected the free and open discussion about
21 accidents, about problems, the sharing of information that's so
22 critical if we're going to have a proper safety culture. But
23 that's what we've got and we've got to work with it and do the
24 best we can, but it does make it more difficult.

25 There's a few -- I want to talk a little bit about safety

1 culture because it's been a big topic of discussion since the
2 blowout. And there's three things, I think, that you never say
3 in a proper safety culture and one of which is it can't happen
4 again. For much of my career I was told to -- I was asked to
5 explain why the Santa Barbara blowout couldn't happen again.
6 And I would always say well, it can happen again, here's what
7 went wrong, but if we don't take care of well integrity it can
8 and will happen again. Because at Santa Barbara as many of you
9 know, they drilled total depth 3,200 feet, casing was that
10 glass (ph) casing at only 230 feet and between that and the
11 productive formation was just a fractured, permeable cap rock.
12 So they were basically asking for a blowout if anything went
13 wrong and something did went wrong -- go wrong when they
14 swabbed in the well, pulling the drill pipe out in preparation
15 to run the production casing, the well started to flow, they
16 were unable to shut it inside the drill pipe, they dropped the
17 drill pipe, closed the (indiscernible) and, of course, with
18 that permeable cap rock you had multiple flow paths back to the
19 surface. So this day we could have the same problem as we
20 learned at both Montara and Macondo, you've got to have well
21 integrity no matter what your solution is in terms of shutting.

22 Another thing you don't say in a proper safety culture is
23 can't happen here. After the Montara blowout which was in
24 August of 2009, most of the talk in the U.S. was about why it
25 can't happen here. All the talk about barriers and regulations

1 and practices, all the why it couldn't happen here and only a
2 few people were really paying attention to what did happen, to
3 the hearings and those of us who were doing that saw some
4 things that definitely could happen here. Cementing problems
5 in the shoe track, 18 of the 39 blowouts in the last report
6 that I wrote with a couple colleagues on blowouts over a 15
7 year period ending 2006, 18 of the 39 of those were associated
8 with cementing issues. The other similarities with Montara are
9 pretty obvious too with the -- with the float valve,
10 (indiscernible) another -- means allow flow through, issues
11 regarding barriers, improper testing to the suspension to
12 verify that there was really no flow inside the casing.

13 Now what's really regrettable, I think, is if there had
14 been a proper system where information was quickly and
15 thoroughly transmitted around the world and people focused on
16 what had happened, it's possible the Macondo could have been
17 prevented because I definitely think they would have been more
18 attentive to the cementing job, to the potential float issues
19 and to the negative pressure tests.

20 Another thing you don't hear in a proper safety culture is
21 can't happen to me. We heard a lot of that after Macondo and
22 this is (indiscernible). In my -- this is just my -- in this
23 country where they have bad regulations, but fortunately there
24 are a few people who get it and one of them is Magne Ognedal, a
25 long time friend of mine and Director General of the Petroleum

1 Safety Authority of Norway. And during the height of Macondo
2 he was called in by the Minister of Labor and Local Government
3 and that's who his agency reports to, he was called into Oslo
4 and she asked him could this happen here and without hesitation
5 he said yes. And she also gets it and she said good, I'm -- I
6 would have been disappointed if you answered that differently.
7 Because they understand what you need to do is focus on why it
8 can happen here and how you can prevent it, not defending why
9 it can't. And that's what he continued to do and they had a
10 little -- he had a nice team that's been following both
11 incidents and they published a very good report, it's on their
12 website, a summary in English, it's excellent, that I would
13 recommend everybody read.

14 I mean, this has kind of been a theme of my career, I've
15 spent a lot of time first with oil spills, why they happen, how
16 they can be prevented, three papers on blowouts and, you know,
17 and it always was done in spare time. We have so many things
18 going on in our different organizations that accident
19 investigation and studies of incidents, trend analysis seems to
20 get pushed back. So I think one of the, in a proper safety
21 culture, most important recommendations is to pay attention to
22 accidents. And what's really disappointing to me is as capable
23 as we are as regulators, as the industry is, we still don't
24 have a proper international data base on incidents with
25 complete, accurate, verified data. It doesn't exist and that's

1 inexcusable. And that's something we all have to work together
2 on. And we're seeing -- we're seeing good signs in that regard
3 from the industry and from government. So I'm optimistic, but
4 we got to keep pushing. But it was very encouraging to see
5 this statement from Peter Coleman who's CEO of Woodside. And
6 this just was in August at a conference in Perc (ph). And
7 there were similar statements from throughout the industry that
8 hey, we're -- we've got to do better in sharing these --
9 sharing this information, studying the trends.

10 Another thing you don't have in a proper safety culture is
11 these -- is this rush to judgment that we always see after
12 publicly -- after accidents that are of keen public interest
13 particularly. And a lot of what you hear right after the
14 incident turns out to be wrong and already within a short time
15 after a blowout people are moving in directions based on what
16 they thought happened that weren't really accurate. A lot of
17 discussion of the long string versus the liner/tieback issue in
18 terms of the well construction, that was probably a relatively
19 minor factor in the blowout. The number of centralizers, I --
20 just reading your report last night made it clear that that was
21 not a factor and it was pretty obvious once we determined that
22 the third point, that the flow was not up the annulus as
23 everyone had speculated before. The only people that I thought
24 -- that I think felt that it was inside the production casing
25 were those of us that had been paying close attention to the

1 Montara blowout because it seemed so similar.

2 Acoustic backups was essentially a non-issue, the remote
3 ROVs, properly designed and maintained are more reliable
4 acoustic backups with the noise coming from oil blowing out,
5 there's no evidence to show how effective they are.

6 This whole thing about deep water operations being
7 riskier, I'll talk to that a little bit later because I think
8 it pertains to the Arctic as well. The facts don't bear that
9 out, this was not really a deep water incident, it occurred in
10 deep water, but deep water was a relatively minor contributing
11 factor.

12 Accusations that we have a reckless industry, I haven't
13 found that to be the case in my 40 years of doing this work.
14 What I have found is that there are a number of companies that
15 are truly excellent, extremely well managed, have tremendous
16 safety management programs, there are some companies that try
17 hard, but they're just not as well managed. There are some
18 companies that have very short term perspectives and really
19 have a higher risk tolerance than I think the public is willing
20 to accept. And then there are other companies that have
21 pockets of problems and I experienced some of those over my
22 career and those of you that work as regulators I'm sure have
23 as well, otherwise seemingly good companies.

24 I had a situation in my district in California where a
25 company falsified blowout preventor tests. This was a major

1 international company and they've since merged with another and
2 it was a major drilling contractor. And it was pretty obvious
3 what the motive was after we got further into the
4 investigation, they had had problems in the past running their
5 test plug, setting their test plug, doing their blowout
6 preventor tests and had taken an awful long time to conduct the
7 test. They were having that problem again, they didn't want to
8 have to explain that to their management. So what they did,
9 they just went ahead and falsified the test, made up test
10 charts, everything. Finally we heard about it from a
11 disgruntled employee. So these are the type of motivations
12 that we have to try and influence, it's an overall safety
13 culture attitude where people are not uncomfortable explaining
14 that sorry again, it's taking a long time, but we got to
15 conduct this test and get in full support of management. And,
16 you know, after this occurred it was pretty clear more why this
17 happened because the senior management and their chain said
18 well, we realize that the regulations are complex and sometimes
19 difficult, but you have to comply. Falsification of data,
20 that's not too complicated, making up BOP tests, there's
21 nothing complicated about that. So yeah, you could see where
22 the cultural problem was there, it wasn't the guys on the rig.

23 Corrupt and incompetent regulator, please, I don't want to
24 spend a lot of your time on that. Let me just say this, I
25 worked with the MMS for the whole time it existed except for

1 the last three months and we were most commonly described as an
2 obscure, federal agency. So I guess we were doing something
3 right. And all these people that are pointing the finger, some
4 can't even pronounce it right, didn't pay attention to safety
5 at all. You never heard them, they were yelling about
6 production measurement which was a terrible distraction, they
7 were worried about every cubic feet of gas and every gallon of
8 liquids that had to be -- they were all involved with
9 alternative energy, nobody -- and leasing programs, things like
10 that, nobody was talking about safety to us from outside, very
11 few.

12 So what do you want to do when you have a -- if you have a
13 proper safety culture, and these next two slides are from Dr.
14 Mark Flemming, Saint Mary's University at Halifax, he's a
15 psychologist who studies safety culture. And I think these are
16 two interesting slides because in a proper safety culture what
17 do you do, you've made a mistake, you know you're going to be
18 backed, you know you're going to -- everybody's going to
19 support you no matter where you are, whether you're a
20 regulator, whether you're an operator or what. You take
21 ownership of the problem, right, and you follow all the actions
22 in orange. Tell someone senior, you cooperate, corrective
23 actions, so the whole goal is to learn from the mistake. So
24 what happens where you see what goes on after an incident where
25 people are -- there may be lip service to telling us everything

1 or -- but then they see what really happens when there's a
2 major accident like Macondo and you're pretty much tarred and
3 feathered or -- they see the accusations, that they see what
4 people really think and here's what happens. You've made a
5 mistake, will it show, no. Well, then you cover it, right, you
6 bury it. If you can hide it you go ahead and do it. If
7 there's other stories coming in you get in first with your side
8 and if there's a chance that nobody will notice you sit and,
9 you know. And how often do we see that, we see that still a
10 lot.

11 I think another challenge to having a proper safety
12 culture is regulatory complexity. We have -- you know, we
13 heard mostly in the aftermath of Macondo about one of the --
14 one of the agencies involved in safety and pollution prevention
15 regulation, but there are three that have primary
16 responsibilities and very much overlapping responsibilities.
17 And there's a lot of confusion and gaps can happen. So one of
18 my initial recommendations to the -- testifying before the
19 Senate Energy & National Resources Committee was that
20 consolidate the offshore safety and pollution prevention
21 responsibilities into a single agency so you have clear
22 accountability, clear responsibility. There's been no movement
23 at all on that issue because it's too challenging for Congress,
24 different committees and not even an attempt. And after
25 Macondo -- if you can't do that after Macondo when can you do

1 it, you can't. So that's something we're going to have to
2 learn to live with.

3 But then there's all the other agencies which have
4 important roles as well. And the two in black are both on the
5 pollution prevention, EPA, Army Corps, you know, they also
6 could be consolidated in, but, you know, I don't think that's
7 critical. The three in green I think should remain as science
8 type agencies and distinct responsibilities. I don't have any
9 issue with that. Then we have the kind of nitch
10 responsibilities, Nuclear Regulatory and FAA and then more of
11 the separate land management of the states and the DOD and the
12 Park Service.

13 But the critical three are here. And just to comment on
14 that a little further, I mean, what happens when you have this
15 kind of complexity, people -- you have overlap and people say
16 well, overlap means underlap because there's sure to be gaps.
17 And (indiscernible) people say oh, that -- don't enter, they're
18 doing it over here. And there's so much time that goes into
19 coordination to figure out who you -- what you have to do for
20 whom, time and energy that should be spent on risk management.
21 And then, of course, there's efficiency and cost and such.

22 Just a couple more examples on that. These are -- I was
23 involved in the development of the MOU with the Coast Guard and
24 I think it's a very good regulatory document, we put a lot of
25 time and effort into it, but there's some things that you never

1 can sort out. And these are three things that were factors in
2 Macondo. Where MMS has jurisdiction over gas detection, Coast
3 Guard fire detection. Well, how can that work, these are
4 integrated systems. Now I've recently done some contract work
5 for a gas and fire detection company and they've got
6 sophisticated systems, the panels are looking at all the
7 readings, you know, you can't separate those two. Same with
8 the emergency shutdown stuff. And also on DP systems, all
9 factors of Macondo, yet we have distinct differences in
10 jurisdiction.

11 And then when the Coast Guard came out in April with their
12 own -- you know, this is a joint investigation, but one of the
13 two parties comes out with their report in April. And it
14 addresses a lot of the issues that also involved the other
15 party. I'm not going to go through them all here, but they're
16 fairly significant issues and they're important to both
17 agencies. So how do you -- how -- you know, this to me is
18 unintended evidence of a dysfunctional situation here and
19 unfortunate. And then their final report came out yesterday,
20 I've only had a chance to skim it, but it's still Volume I,
21 Coast Guard, Volume II, BOEMRE. Is this a joint report,
22 there's a lot of issues involved.

23 Now I know there's a split of jurisdiction up here and I
24 don't know enough about your situation, it all could be
25 perfectly fine, everything could be good, but I -- it's

1 something I think is worth Alaska considering is how effective
2 it is at -- in -- you know, that's all I'm going to say about
3 that.

4 Here was a situation at Varanus Island 2008. It's a gas
5 plant and a pipe line rupture coming into the gas plant caused
6 a huge fire and explosion, 30 percent of the gas supply for
7 Western Australia was lost for a significant period of time so
8 it was a major economic factor. Involved a state regulator and
9 the federal regulator, they call it commonwealth regulator.
10 Both were doing this, it turns out that there was no -- this
11 was one of these gaps, that there was really no regulations
12 that apply. And the report -- the incident occurred 2008, the
13 public report is still not out partly because of these
14 regulatory issues.

15 Alexander Kielland, 1980, Norwegians learned some
16 important lesson there. That was a floatel, a floating
17 quarters facility, 123 people lost their lives, there were, I
18 think, 180 on the facility. They had an extensive
19 investigation and the Commission found what you see, that they
20 really needed to streamline their program and have fewer
21 agencies to improve coordination. And they did that. Now you
22 -- I've provided the link to a summary of some of the things
23 that they've done, but they moved quickly to do that and
24 probably have, you know, one of the more respected regulatory
25 regimes in the world right now.

1 And then again from our IRF conference, I was the program
2 committee last October in Vancouver and, you know, same
3 message, regulatory regimes function most effectively when a
4 single entity has broad safety and pollution prevention
5 responsibility. Now we know we can't always do this for lots
6 of reasons political and otherwise. So that -- then you have
7 to have, in my opinion, kind of established units that work
8 together on that portion of the regulatory program. In other
9 words dedicated individuals in units in each organization that
10 work together almost on a daily basis to make sure all this
11 works.

12 Well, we really got into heavy discussions about
13 regulatory philosophy, regulatory strategy starting in 1988
14 with Piper Alpha. Worst tragedy in the history of offshore oil
15 and gas operations, 167 people killed, just unimaginable the
16 impact on the society there in Scotland. So they had Lord
17 Cullen, a highly respected jurist do an investigation and it
18 turned out it was one of the more important reports in the
19 history of offshore oil and gas operations. And Lord Cullen
20 criticized the compliance mentality, criticized the checklist
21 approach, the fact that people were not focusing on managing
22 the risk, managing their safety of the operation, they were
23 just paying attention to what they had to do to comply and get
24 their permits. So they ended up with more of a safety
25 management system of regime and the focus of that was the

1 safety case which for each facility outlines the risks,
2 outlines the programs to mitigate those risks, management of
3 change, training, all the programs that are intended to have a
4 safe operation.

5 Now no matter how you look -- you know, I can argue either
6 way on the safety case and on the different type of regimes. I
7 think there's strengths and weaknesses to all, but no matter
8 how you look at it you have to have an underlying philosophical
9 regulatory philosophy for your program. Are you going to be a
10 prescriptive program with goals which the MMS was not just a
11 prescriptive program, it was a prescriptive program with goals.
12 And that can work. Are you going to be a safety management
13 regime and in that case you're going to need some prescription
14 as well and that can be very effective and over the long-term
15 maybe the most effective. But I think any regulator has to
16 decide what kind of regime are they going to have and how can
17 they most effectively manage it.

18 So the MMS at the time of Piper Alpha took a real interest
19 in safety management, started taking a real interest, but there
20 wasn't the pressure, external pressure, and there was a good
21 bit of internal concern about changing the type of regime at
22 that point. They had a fairly effective program, pretty highly
23 regarded program, the culture in the Gulf of Mexico was well
24 suited to what was in place which was mostly the black there.
25 So what happened was that we went with kind of a voluntary

1 safety management approach, recognizing that to be successful
2 operators had to have a comprehensive safety management program
3 or they wouldn't be able to achieve in the other areas in
4 black. The problem -- I mean, that actually is okay, but then
5 you ultimately have to make a decision as I said are you going
6 to go with a safety management regime or more of a prescriptive
7 regime because you can't have command and control within a
8 safety management regime, it doesn't -- it's contradictory.
9 You don't say you got to manage your operations, we'll audit
10 you, we'll focus on what you're doing as a management team and
11 then say, but we're also going to approve every change you make
12 in every program. It's just contradictory and totally
13 ineffective.

14 So I think that is where MMS has struggled and continues
15 to struggle. Right now mandatory safety management is being
16 added as another piece of a program without really deciding
17 what the fundamental philosophy of the regime is going to be.

18 Just quickly, any regime has to have some prescriptive
19 rules, whether it's safety management or a traditional goal
20 based prescriptive regime. If you have certain expectations
21 from the industry you regulate you might as well lay them out.
22 There's always going to be use of standards, particularly
23 industry standards, there always has to be some sort of plan
24 accepted, acknowledgement approval. Hopefully with better
25 companies, once they've demonstrated that they have effective

1 management systems in place, there can be some backing off on
2 that part of it.

3 There always has to be some inspection and enforcement,
4 you have to see that what's being proposed, what's being
5 planned is effectively being implemented no matter what type of
6 regime. Always has to be comprehensive accident investigation,
7 I think there's always a role for government in that.

8 Training, research, I'm a believer in recognition
9 programs, I think we have to not just penalize people, but we
10 have to recognize them for outstanding achievement. Annual
11 performance reviews is something we picked up about 10, 15
12 years ago, I think that's a great program where you sit down
13 with each operator every year and go over what you think
14 they're doing well and what -- where you think there's some
15 problems.

16 And then, of course, information sharing and we've talked
17 a lot about that.

18 Over the long-term there is some real problems with
19 command and control regulations. If you have to have a new
20 regulation for -- to act, it's going to take a long time to
21 respond, very labor intensive, there's a whole -- even though
22 reading the report last night on Macondo, virtually all the
23 regulations that they cited as being violated during the
24 blowout were actually more performance based rules. If you
25 look at them, didn't maintain well integrity, polluted the

1 environment, created an unsafe environment, kind of a
2 performance standard on cementing, those were all more of the
3 performance. So to get details on everything that went wrong,
4 I assume there will be another sweep of prescriptive, but you
5 can never catch up, you're always going to be chasing the next
6 regulation. You can never entirely eliminate the gaps, you
7 always have the blurred lines of authority, accountability as
8 to what the operator's responsible, what for the regulator.

9 And we've talked about the safety management principles.

10 And so, you know, you're worse off -- your worst operators
11 they love this prescriptive regime, command and control regime
12 because they're not accountable. You the regulator approved
13 everything they did so you're accountable, something goes wrong
14 it's on you. They get the regulator to do all their
15 inspections, they don't really do many inspections of them --
16 their own that they're -- and they even get the regulator to do
17 some of their geologic work sometimes, I've seen that.

18 And rule development takes time. A guy in the Coast Guard
19 retired last year, he worked his whole career on one rule. I
20 gave him this slide at his retirement, it's got a symbol, but
21 it's kind of -- it's a big of an exaggeration, they didn't --
22 he didn't actually start at the big bang with his proposal, but
23 it really did need a geologic time chart to get us through the
24 whole period. But it takes at least two years to promulgate a
25 regulation in the federal system, more likely four to five and

1 sometimes 10 to 20.

2 You know, I respect a lot what the Norwegians have done
3 and a lot of lessons to be learned there. You know, they make
4 the companies take ownership for their problems, they make the
5 companies then come in with solutions. And then they tell --
6 then they rule as to whether they're adequate and they're
7 tough, they're tough on whether their solutions are acceptable.
8 And they don't take on tasks that they feel are the industry's
9 responsibility.

10 Now I was a reviewer of the 30 day report after Macondo
11 and while I didn't think a moratorium was the answer, I thought
12 it was perfectly understandable under the circumstances.
13 Everybody that's been involved in offshore oil and gas
14 operations has known that if something like this is -- had
15 happened there was going to be a huge reaction, politically and
16 otherwise. So nobody should have been surprised when the
17 moratorium came on. That said, was it the best approach?
18 Probably not. That's when everybody was at their -- at
19 heightened alert, most careful and that might have been the
20 time where you say okay, industry, come into us with your
21 solution, you've got 60 days, if we're not satisfied with the
22 entire program we're going into a moratorium until we work this
23 out. That just is (indiscernible).

24 Now let me just comment based on my own experience on the
25 keys that I see to successful regulation no matter what type of

1 regime you have. And one is to know what your objective is.
2 That sounds pretty simple, but if you read what different
3 regulators have for their objective, for their goal or for
4 their theme mission statement, it's to be the best regulator in
5 the world. Does that tell you anything, to be -- to have the
6 most stringent regulatory program. See how many times have we
7 read that in the paper since Macondo. We're going to have the
8 most restrictive in the -- that doesn't meaning anything. The
9 Russians had the most -- this is what people tell me, the
10 former Soviet Union had the most restrictive regulations of
11 anybody, but their pipe lines routinely leaked 10 percent. So
12 to me follow objective is sustained excellence in safety and
13 pollution prevention, that's really what we're striving for and
14 then we go into the way we're going to achieve it through risk
15 management, regulations, inspections, whatever.

16 You need for the regulator to be able to stay focused.
17 MMS during the five years prior to Macondo, constant, constant
18 issues on production measurement from GAO and from everybody
19 else, again worrying about the last gallon of liquids coming
20 out of some plant, isolated plant, somewhere in Louisiana and
21 we had to dedicate a lot of resources to that that shouldn't
22 have been.

23 New programs emerging for hurricanes was a huge issue and
24 one that was an important issue. So one you had to dedicate a
25 lot of resources to.

1 It's a real challenge for management to keep focused and
2 don't let people -- don't let people take your resources and
3 redirect them.

4 Accountability's absolutely critical and in a lot of
5 systems you don't see it as clearly as it should be. There's a
6 lot of debate about what the contractor's responsible -- you
7 know, how direct -- should you directly regulate the
8 contractor. I think in some situations probably we should
9 where we have mobile drilling units, they're going from
10 location to location, going around the world, seems like it
11 would be best to directly regulate the rig and the associated
12 equipment directly to the contractor.

13 Of course monitor performance, talk a little bit about --
14 more about that.

15 Risk assessment, innovation, you know the last thing we
16 want our regulations to do is stifle improvements. And if it's
17 too difficult to try something different that looks like it
18 could easily be better, then that's a problem.

19 Well, that's pretty obvious too and I think from what I've
20 seen you're very fortunate in that regard, but from what I've
21 seen it's more important to have quality regulators than to
22 have perfect regulations. Quality regulators are always going
23 to challenge the industry, they know -- they know the business,
24 they're diligent, they know what their role is and distractions
25 are a problem.

1 Another issue that's cropped up since Macondo is
2 communication with the industry. With all the talk about
3 ethics and possible ethic violations most of which was
4 incorrect at least with regard to the offshore regulatory
5 program, people have been discouraged from talking to their
6 counterparts that they regulate and you just can't work that
7 way. You really have to have full communication with the
8 industry that you're regulating knowing the ethics rules and
9 paying 100 percent attention to those as well.

10 And, of course, the other things, you know, I don't think
11 you can have an effective regime without it being efficient.
12 If you're not efficient then there's some problem either you're
13 -- the companies don't get it or they're incapable or they
14 don't know what's expected or you've got processes that don't
15 add value. So something's wrong.

16 And the study of successes and failures I've talked about
17 that and will to death.

18 And I -- you know, I think it's important that the
19 regulators regulate, not operate. And we discussed this a
20 little bit already, but, you know, we're regulators, we can't
21 operate every facility in the Gulf of Mexico, in Alaska or
22 wherever, you know, we have to have a regulatory system in
23 place that will do that.

24 You know, Yogi always said if you don't know where you're
25 going you're going to end up somewhere else. So we have to be

1 able to monitor performance somewhere and somehow. And you
2 start with the obvious, you've got to collect complete incident
3 data and hopefully we're going to have a system internationally
4 where we're all going to be doing that. And here's an area
5 where you definitely have to be prescriptive because if you're
6 not totally prescriptive you're going to get different things
7 from everybody, you're not going to have a means of comparison
8 between companies, between regions of the world. So incident
9 report rules have to be highly prescriptive. We made ours more
10 prescriptive starting in 2005, but we didn't get everything we
11 needed and wanted because sadly there was tremendous objection
12 to a rule that's only intention was to provide information for
13 industry's own planners and for government's regulators to
14 better understand the risks. And I think that was a low moment
15 at least for the offshore industry, their strong objections to
16 our incident reporting rule.

17 Leading indicators has always been the bigger challenge
18 even though we haven't got the basic stuff right yet like the
19 accidents. And, you know, these are just my own list, thinking
20 out loud and, of course, talking to others. Now the first two
21 are obvious and critical. We need information on failures to
22 detect influxes, kicks, fluid loss or gain, you know, what
23 happened and why. I think that was -- those are good -- that's
24 a good leading indicator. The barrier failures, of course.
25 Casing, cementing, we've talked a lot about.

1 Any failure in a blowout preventor system, the choke and
2 kill lines or any valves, any of the rams, of course. I think
3 BOP pressure test failure is on the critical components is
4 maybe a decent leading indicator of pressure tests.

5 Well integrity issues, sustained casing pressure, lot of
6 wells have those problems as some of you well know all over the
7 world.

8 Gas releases, we included gas releases in our new rule,
9 it's kind of a worldwide standard for leading indicators, but
10 because of the opposition it's not -- we're not get -- the MMS
11 wasn't getting the information that we needed, it was too
12 watered down, we need some specific gas release information.
13 That's the leading precursor to a major accident. The Piper
14 Alpha started with a small gas release.

15 Training. I think it would be useful to have some better
16 indicators on training and they're probably out there
17 somewhere, maybe some of the time that's dedicated to training,
18 maybe some effectiveness measures, survey tools, I don't know.
19 I think just -- these are kind of thinking out loud things.

20 And I think certainly worker surveys are an important
21 tool, at least that's what Dupont said and they were one of the
22 pioneers in safety management. I think if they're constructed
23 right they're a good tool to determine a company's commitment
24 to safety.

25 All right. I don't know what's been done on blowout risk

1 reviews in the Arctic. And I've seen some statistics thrown
2 about of blowout rates and I don't know what all has been done
3 actually in the Arctic and most of what I've seen has involved
4 drilling elsewhere. So that might be an area where I think
5 some attention could be paid because a lot of statements are
6 made about blowout risks particularly after Macondo so I did
7 this little slide after the blowout on deep water drilling
8 risks and I've since put in red some thoughts regarding the
9 Arctic. And what we found -- what I -- what we found when we
10 looked at deep water drilling has had a lower blowout rate
11 considerably. Now the sample was small, but it was still
12 significant because there's over 2,500 wells driven in 1,000
13 feet of water. So it was, you know, about half the risk for
14 elsewhere on the shelf.

15 The BOP tests all indicated that the deep water blowout
16 preventors were more reliable and I'll talk more about that in
17 a minute.

18 Now one negative in deep water is you don't have access to
19 the wellhead, the BOP, it's not right there in your face and
20 that is also a plus for the Arctic where you typically have
21 more land operations. However on the other hand it's actually
22 easier to do and safer to do -- in my opinion, to do
23 intervention in the event of a blowout with a subsea well.
24 You saw how well the ROVs worked and their ability there. Had
25 they had confidence in the well integrity and gone right to a

1 well capping operation it would have been a much shorter
2 blowout. So I'd rather -- I'd much rather cap a well that's
3 blowing on the sea floor than one that's blowing on a platform.
4 Montara was in only 80 meters of water, they couldn't do
5 anything both for safety reasons and because of the way the
6 well had been left suspended. Montara had really no barriers,
7 they didn't have no BOP, they had -- the second barrier had a
8 bad casing cement in the base of the production casing. So the
9 only barrier was the relief well and the end result.

10 Of course the riser creates some complications if you get
11 gas trapped in your BOP and it -- you let that gas out and it
12 expands rapidly in the riser or that -- that's a problem. So
13 that's an advantage for you on land operations and more Arctic
14 type operations.

15 And again you have to have well integrity no matter where
16 you are. So the big risk with Macondo like wells is while
17 you're drilling them, they've got such great potential. You
18 know, we could have a perfect by just drilling dryholes, that's
19 not what the business is.

20 This was a study that was done for MMS and it's been a
21 while back, but it's still the most recent. And you'll see the
22 two columns on the left there are for surface stacks and the
23 bottom are for subsea stacks and these are failure rates in two
24 different surveys, two different scales. So you can see you've
25 got an order of magnitude, higher failure rates on the surface

1 stacks than you have on the subsea stacks. These are critical
2 failures during blowout preventor pressure tests. The reason,
3 of course, or at least suspected reason is it costs so much to
4 pull and repair the stack in deep water, you're going to have
5 top notch maintenance programs there. So these land rigs and
6 surface stack operations basically use the BOP test to
7 determine when they needed to do maintenance and that's
8 obviously not what you want to do.

9 Again I don't think it's correct to assume blowout rates
10 in the Arctic or anywhere in Alaska based on Gulf of Mexico
11 data and largely geologic phenomena, most of the blowouts, more
12 than half, are attributable to shallow gas formations that are
13 encountered before you have adequate well integrity, they're
14 usually of very short duration, sometimes just minutes or
15 hours. So your geology has a lot to do with your blowout rate
16 potential and your blowout potential. So I think I've seen too
17 much use of Gulf of Mexico data to project blowout rates
18 elsewhere.

19 And then, of course, type of wells is a factor. Some
20 additional considerations are horizontal wells and the well
21 potential, of course.

22 BOP test records may be something we should look more at
23 to provide useful failure rates and I talked -- just talked
24 about that. Again the historic well control data, it's
25 important to consider your intervention options and everybody's

1 doing that now, and barriers too, that's front and center.

2 Based on what I've seen just looking independently at your
3 regulations, it seems like you have more of a program based BOP
4 design requirements, I think that's the way I'm reading it, and
5 I think that's good. I -- and I don't think we're ever going
6 to have a one size fits all for blowout preventor arrangements.
7 You got to look at the risks and the type of wells and the
8 special situations and design accordingly.

9 I think your test frequency, I think it's every other
10 week, every 14 days, is on target. Too frequently you pose --
11 now we did a number of studies there, it showed there was
12 really no difference in risk between a seven day and a 14 day
13 test, there's been a lot of push to go beyond 14 days and I
14 haven't seen any compelling justification for that yet.

15 Something I didn't notice was a shear ram requirement for
16 surface stacks. That may be something that is fairly commonly
17 done anyway, but that link provides a bunch of evidence as to
18 why we decided that you needed a shear ram requirement for
19 surface stacks. There's just some situations where you're
20 going to have an obstruction even on a surface stack such that
21 you need to shear.

22 And I want to -- again one of the things that I said in my
23 senate testimony was the need for some sort of a international
24 standards that will help us compare BOP stack capabilities, ram
25 capabilities, shearing capabilities, performance capabilities,

1 something you can look at stack A and compare with stack B.

2 It might be useful to have some sort of a failure
3 inventory reporting system. This is something we had started
4 years and years ago and it was a little bit too much of a
5 paperwork burden, but should be much less so now and might be
6 something worth considering for -- not just for blowout
7 prevention equipment, but for other safety systems and safety
8 devices.

9 I think there's a lot of uncertainty regarding inspection
10 and maintenance issues especially because of the way that
11 industry standards are written, recommended practices always
12 use should because they're recommended practices. MMS always
13 took should as shall and has recently said that in their new
14 regulations. That creates some other complications so this
15 really needs to be sorted out. Transocean in their defense,
16 they hadn't done a major overhaul in -- I think it was 10 years
17 on the Deepwater Horizon stack. RP 53 said they were well past
18 when the major overhaul inspection was due, they said well, it
19 says should so we have an option, we've got some latitude.
20 That has to be sorted out.

21 Again the operator versus drilling contractor
22 responsibilities, I'd already discussed that.

23 Third party certifications got a lot -- gotten a lot of
24 attention since the blowout. My personal view is that it
25 doesn't always add value. We have -- I've seen good companies

1 that have tremendous programs for designing platforms, we've
2 got a third party certification program for platforms for
3 decades. And third party verifier didn't really add a whole
4 lot of value. I've seen some companies that didn't have such
5 good internal programs and the third party verifier still
6 didn't add much value because they hired one that was suited to
7 their philosophy. And it's very difficult to deny a third
8 party an opportunity to do business, you have to have very
9 specific evidence that demonstrates that they're not qualified
10 or competent. So I tend to not think that third party adds a
11 lot, if you got a good company as an operator it doesn't add
12 value and if you have a bad one it still often doesn't.

13 Witnessing BOP tests, I think it's important to witness
14 some. I don't more is better. There's no evidence that
15 witnessing more BOP tests would have prevented Macondo,
16 certainly wouldn't have prevented Montara. And there's still
17 questions as to what more can be done. A witness -- right now
18 the new witnessing is more of the automatic systems that'll
19 function when there's a rise or disconnect for emergency
20 reasons and things like that, the dead man and the automatic
21 mode functioning.

22 One thing I was very happy to see recommended in the
23 report, reading it yesterday, was real time monitoring of BOP
24 functions. This is technology that's been around for years, it
25 tells you back in your office or anywhere you want to be when

1 the BOP has been actuated, what pressure it's being tested at
2 or what pressure it's being exposed to. It helps you do -- it
3 helps you do management of maintenance and things too knowing
4 -- so it's really not an expensive technology. And by the way
5 I have no financial relationship of any kind with Rig Watcher,
6 I'm sure that there are other companies that do this. So I'm
7 not trying to promote their product, but it just seems
8 surprising to me that there's been so little real time
9 monitoring of basic BOP functions. And you also then have a
10 black box that tells you everything that was done on that BOP
11 over time, if it's blown up you've got all these records back
12 at the beach. So this is a no-brainer and I was very pleased
13 -- I recommended it last May at the senate hearing, I was very
14 pleased to see that it was in the report released yesterday.

15 Other well control comments. Negative pressure test, of
16 course. They told them to do a negative pressure test, I don't
17 think they really had done a lot of them and really understood
18 how to interpret them. And the same thing at Montara where
19 they really didn't do a negative pressure test at all, but they
20 did kind of a -- stopped to see if there was any flow. So
21 yeah, this is a clear area where we need to do better.

22 I'm a big fan of team based training. Team and rig, you
23 know, if you work on a rig as a team you should train together
24 and simulate as close as possible what actual equipment you
25 have on that rig and how you work on that rig. Big fan of

1 that.

2 Some issues like solubility of gas, much higher in oil
3 based mud, sometimes more difficult to detect gas coming out of
4 solution. You can sit and wait as it happens and then later
5 you get a big kick on your hands.

6 Casing and cementing requirements, I don't think you're
7 ever going to come out with a standard that tells you
8 everything. So we really have to look at each program and
9 challenge ourselves to make sure that what we have is optimal
10 for that well.

11 And this idea of concurrent relief wells has been around
12 for a long time and never -- maybe I'm missing something, I
13 really don't see any value to it. It seems to me like it adds
14 risks. You don't know exactly what your target's going to be
15 anyway so I don't see really a lot of value there. Since 1971
16 when I started closely monitoring drilling blowouts, not one
17 was killed by a relief well in U.S. waters and that includes
18 Macondo. Macondo was closed by the surfacing capping
19 operation. There was a lot of fanfare about the relief well
20 being the final solution so they continued on through. That
21 well -- that relief well could have been plugged shortly after
22 July 15, with the surface killing up, with the complete
23 (indiscernible) of the surface killing operation.

24 Montara had no surface kill operation whatsoever because
25 of the way the well was left suspended with just the 20 inch

1 stub back up to the platform and the 20 inch -- the 13 and
2 three-eighth inch casing inside that wasn't even cemented back
3 to surface. So even if they were able to stab some sort of
4 blowout preventor around the 20 inch, and it would have been
5 extremely risky under the circumstances, they couldn't have
6 shut in the well, they wouldn't have had any integrity so their
7 only option was a relief well. They didn't even have -- they
8 had -- all they had was the cement at the shoe with no industry
9 accepted barrier, they had one corrosion plug, there was a
10 corrosion cap, they were supposed to have two. That's not an
11 accepted barrier and they only had one of two. That was
12 (indiscernible).

13 I like the idea of some sort of relief well planned on,
14 how are you going to go about it, I don't think you -- there's
15 any -- any reason for starting a relief well until you have a
16 need for it, but I think you have to have a plan for how you're
17 going to do it.

18 Other issues that bothered me, these bypassing/silencing
19 of alarms always bothers me. It bothers me more now that it
20 happened at Macondo, probably wouldn't have affected the final
21 result there, but, you know, if you have alarm systems that you
22 have to silence because they wake people up or because you're
23 getting too many false alarms you've got to re-engineer your
24 alarm systems. And there are ways to do that, there are smart
25 systems out there now, (indiscernible) alarms that can sort out

1 the chatter. We haven't heard much about this since the
2 blowout, have we?

3 Proper use of standards or should standards be
4 incorporated directly into your regulations like the Department
5 of Interior does and then you have to (indiscernible) on all
6 those others issues and muck -- or should they be referenced in
7 operator programs and safety management plans and things like
8 that. That has to be sorted out.

9 Again I talked about regulatory responsibilities. I see
10 where you folks also do production measurement, I assume it
11 works out quite well for the Commission. I just think it was a
12 problem for MMS toward the end with resources being diverted.
13 And as long as you've managed that fine, I assume you're fine.

14 Alaska incident data, I didn't see any of that -- I
15 haven't seen any of that online. I think that would be useful
16 to everybody if that could be published. I would love to see
17 Alaska and all the states participating in this grand
18 international system that I'm confident is coming. And I think
19 there are more things we can do to facilitate failure inventory
20 systems like bar coding of safety devices, making it simple to
21 do certain types of checks there and collect data.

22 Continuing to harp on accident reports and the need for an
23 international system, this is a bunch I used to keep track of
24 on the blog, with the blog now gone I don't see anybody filling
25 this important void, but, you know, we really need for

1 everybody to be releasing information on major incidents like
2 these. And two of them are in the U.S. And the first one was
3 actually during an offshore wind project or preparation for an
4 offshore wind project, collecting environmental data. And it
5 was a jack-up boat, should have never been out there. Jack-up
6 boats are notoriously unstable, one just went down off of
7 Mexico in a tropical storm and fatalities there. No way a
8 jack-up should have been out there in the long term collecting
9 data in the spring in the Atlantic off of Delaware.

10 I'll just close by saying safety culture, safety culture,
11 safety culture, we have to keep thinking it, have to keep
12 promoting it, to keep reading it, talking about it, everybody
13 has to always be on edge. You have to focus on failures, not
14 successes. These are low consequence -- high consequence, low
15 frequency events. People keep complacent. We went 40 years,
16 my whole career we didn't have -- I was started after Santa
17 Barbara and the two big Gulf incidents and I left before
18 Macondo. My whole career no big pollution spectaculars. Bad
19 incidents, but -- so we have to keep people focused, we have to
20 explain to them why it could happen to them, why it could
21 happen here, why this little incident could have been this big
22 incident. That's safety culture, keep people -- let them --
23 making sure everybody knows that they have the full confidence
24 of the company, of the government, to do the right thing no
25 matter what -- no matter what happens and that safety is always

1 the highest priority, it's not just lip service. And you could
2 have bad safety cultures.

3 Now we had our awards programs every year and I used to --
4 we always used to recognize the companies that did great and
5 those that didn't have such good culture. And with the feet --
6 the hallmark picture Around the World, of course, is the famous
7 one from Arizona Highway Department. That's not the type of
8 culture you want in your organization.

9 And we got our own equivalent in the OCS program where
10 this is a facility, I'm not going to tell you where or who the
11 operator was, this is a platform, one company was operator of
12 the platform and another company was operating the pipe line
13 and the regulators were different too. So the platform
14 operator, they had the platform all nice and shiny and well
15 painted, but the pipe line, you can see what condition that was
16 in. And even they -- they must have had a little rule that
17 they had to put a little -- had a two foot buffer or something
18 around the pipe line because you can see the grating wasn't
19 painted either.

20 So let me just conclude by saying that spit happens so
21 always be on the alert for upset conditions, shallow gas and
22 uncontrolled fluid flowing.

23 Thank you for your time. I took my full allotment here
24 and I'm sorry if I was too long, but there's loads and loads of
25 things to talk about. If anybody has any questions and there's

1 still time I'll be happy to respond.

2 CHAIR SEAMOUNT: Thank you, Mr. Danenberger. Commissioner
3 Foerster, you've taken a lot of notes, do you have any
4 questions?

5 COMMISSIONER FOERSTER: Yes, I do.

6 REPORTER: Before you start may I change the tape, please?

7 (Off record - 10:47 a.m.)

8 (On record - 11:00 a.m.)

9 COMMISSIONER FOERSTER: I'll start with a question you
10 probably won't answer. What company falsified BOPE tests?

11 MR. DANENBERGER: It's a matter of public record. Yeah,
12 it was -- Texaco was the operator, Elmrick & Payne was the
13 drilling contractor. And again, I don't -- I'm not saying
14 there was a systemic problem in either of these companies, but
15 there was a local problem which became quite evident
16 afterwards.

17 COMMISSIONER FOERSTER: Okay. Second question. You
18 mentioned the importance of identifying and eliminating
19 overlaps, gaps, conflicts and confusion. In your review of our
20 regulations you made some vague allusions to that, could you
21 specify any of those that you identified?

22 MR. DANENBERGER: Well, I'm an outsider, I don't know your
23 program, I don't know what I've read, I -- and.....

24 COMMISSIONER FOERSTER: We won't get our feelings hurt
25 and.....

1 MR. DANENBERGER: Yeah.

2 COMMISSIONER FOERSTER:but, you know, just based
3 on.....

4 MR. DANENBERGER: Okay.

5 COMMISSIONER FOERSTER:what you've read did you
6 notice anything?

7 MR. DANENBERGER: Well, based on what I've seen there's
8 some confusion, I'm reading some articles about this jack-up
9 that's coming in and other things. I think there's some
10 confusion. It looks to me like you are a primary regulator for
11 well control and well construction and design, those issues and
12 have some function for production safety, it's not clear though
13 that you have quite the program for production safety that you
14 have for drilling. It appears to me that the Division of Oil &
15 Gas, DNR, also has jurisdiction that can be imposed, perhaps
16 during the rights issuance process or planning process through
17 stipulations or other means. I think there's some potential
18 for problems there and I've definitely seen some in the past.
19 Not here. Not here, but -- and then it seems to me -- again
20 I'm the total outsider even though -- and even though I'm from
21 Washington I don't know more about your program than you do.
22 So the DEC has some back end (ph) authority it seems to me
23 through their pollution prevention mandate. So again you're
24 small and you probably work together well and that this may not
25 be an issue, but it -- I think regulators around the world

1 think -- well, what I tried to say, overlap.....

2 COMMISSIONER FOERSTER: Well, we appreciate that because,
3 you know, if you have confusion then how do you think a new
4 operator coming to the state feels when they try to figure out
5 who's on first. So I appreciate your comments.....

6 MR. DANENBERGER: Well, let me -- I.....

7 COMMISSIONER FOERSTER:don't be shy.

8 MR. DANENBERGER:I mean, I hate to go on, but.....

9 COMMISSIONER FOERSTER: Go on. I hate for you not to go
10 on.

11 MR. DANENBERGER: Okay. Well, let me go to another
12 industry, offshore wind. Pity the poor -- these are little
13 entrepreneurs by and large, people with good intentions, but no
14 experience in project management and they're trying to start a
15 new industry and provide energy, green energy. So I was at an
16 offshore wind conference safety and there was a line up of 10
17 -- a panel of 10 regulatory agencies up front, all of whom had
18 some responsibility. I said -- I'm thinking to myself if I'm a
19 poor, little company trying to break into this industry I'm
20 getting up and walking out, they're all explaining it and I
21 can't deal with this. Not necessarily an example that applies
22 here, but Australia was a very -- Australia and NOPSA, the
23 National Offshore Petroleum Safety Authority, actually had no
24 jurisdiction over the well design and construction, but they
25 had responsibility for the rig safety case. How can that work,

1 you know, the -- it's just a -- fortunately Australia's done
2 the right thing, I see no momentum in the U.S. in that regard.
3 And it's actually going to get a little more complicated
4 because I think they're doing the right thing by separating the
5 rights issuance from the regulatory piece in the DOI, but plans
6 are still going to be, looks like, in the rights issuance part.
7 So then you're going to have a fourth party involved in
8 addition to the lessor.

9 COMMISSIONER FOERSTER: Those are my big questions.

10 CHAIR SEAMOUNT: Thank you, Commissioner Foerster.
11 Commissioner Norman.

12 COMMISSIONER NORMAN: Thank you, Chairman Seamount. Mr.
13 Danenberger, thank you very much for an excellent presentation
14 and I can't tell you how valuable it is to hear.....

15 COMMISSIONER FOERSTER: Right.

16 COMMISSIONER NORMAN:from someone with your
17 experience. We expect properly so we will get a lot of
18 different perspectives, we hope we will, but yours and your --
19 the experience you bring to bear is very appreciated.

20 I have two questions each on items you touched on. The
21 first one, you mentioned the value of creating a data base for
22 incidents. You, I think, correctly identified that we live in
23 a litigious society, you put on the chart there the normal
24 human reactions to -- when something goes wrong. And it
25 triggered a remembrance in my mind of a presentation by an

1 extremely experienced surgeon, probably as many years on the
2 operating table as you have regulating oil and gas. And in
3 that presentation he lamented the fact that there was not some
4 way, some central clearing house, where with guarantee of
5 anonymity, incidents could be reported so that younger, less
6 experienced surgeons could consult this and say when you are
7 performing this particular.....

8 MR. DANENBERGER: Yeah.

9 COMMISSIONER NORMAN:procedure this went wrong. So
10 my question to you is do you have any ideas on how that might
11 be accomplished. I don't believe that an agency such as ours,
12 we cannot promise anonymity and, in fact, we are the watchdog
13 and if something comes to our attention we're obligated to
14 follow through on it. But in the near misses that happen all
15 the time perhaps in aircraft or whatever, it would be very
16 valuable if there could be some central reporting
17 mechanism.....

18 MR. DANENBERGER: Yeah.

19 COMMISSIONER NORMAN:and I'd like your thoughts on
20 that.

21 MR. DANENBERGER: Yeah, I've got several thoughts. I
22 think it has to be a partnership among the regulators and the
23 industry. I think the regulators cooperating together
24 internationally can agree and already have started to agree on
25 definitions like what's an injury here. And so we all have the

1 same definitions and we're comparing apples and apples. That's
2 a huge task and it's already pretty well underway. So that's
3 important.

4 In terms of getting the information I don't think it can
5 be voluntary, both for the liability reasons you raised and
6 because voluntary reporting doesn't really work. Some
7 companies are not going to report bad stuff. You know, we're
8 -- we've seen lots of voluntary data bases that don't work. So
9 that's where you have to -- you need the involvement of the
10 regulator.

11 Litigation -- in MMS everything we got was pretty much
12 public unless it was so -- you can't announce the names of
13 people who were killed or hurt, things like that, but most of
14 the rest is public and I think a lot of this is kind of an
15 excuse. So a lot of the litigation stuff is an excuse and a
16 lot of the litigation is between the companies themselves as
17 you see now after Macondo.

18 So that's going to be a key piece of this, but I think --
19 I think I am encouraged now that everybody's getting onboard,
20 the new Center for Offshore Safety is talking about this, oddly
21 they're only doing it for deep water. That's kind of
22 ridiculous.

23 So not a very good answer to your question, but I think
24 this can be worked if we get everybody in agreement and if we
25 need legislation then we need legislation, but I think we can

1 go pretty far with what we've got now. And hopefully Alaska
2 can get involved with the bigger program because you share the
3 weight of a tremendous amount to add and very good people.
4 This is.....

5 COMMISSIONER NORMAN: My other question relates to the
6 should versus must issue that you identified and regulations
7 and potential for some confusion. And as an example -- and
8 I'll just ask you if you have any thoughts on this or have run
9 into this, but as an example I'll cite one of our specific
10 regulations pertaining to hydrogen sulfate measures just as an
11 example. The regulation, and I'll paraphrase somewhat, if
12 hydrogen sulfate gas is encountered while drilling the operator
13 shall, so there's mandatory, shall conform with API and then it
14 references the API recommended practices.....

15 MR. DANENBERGER: Right. Right.

16 COMMISSIONER NORMAN:so you get into this loop. Can
17 you comment on that and.....

18 MR. DANENBERGER: Yeah. So we at -- in the MMS had on
19 several occasions, I think, made it clear that should means
20 shall when we incorporate RPs into the regulations. Now I've
21 been having a hard time finding those examples now that this
22 has become a -- something of an international issue, but that
23 was always our feeling that -- now that doesn't mean you had to
24 do it that way, you can always talk to us or you could modify
25 in your plan how you propose to do it. So, you know, doesn't

1 mean you had to do it that way, but it was our understanding
2 was that it was shall. And I think if you're going to -- if
3 you're going to incorporate standards in the prescriptive rules
4 it has to work that way, the recommended practices, I don't see
5 any other way it can work.

6 Now as -- you know, if you're going more towards a safety
7 management regime then in the safety management program or
8 safety case or whatever you have you would explain how you were
9 going to determine how you would interpret should versus -- how
10 you would interpret these shoulds. But this is going to be an
11 interesting issue and it's central in some of the Macondo
12 litigation because Transocean's saying wait a second, it says
13 should.

14 COMMISSIONER NORMAN: Yeah, thank you. That's helpful
15 and.....

16 MR. DANENBERGER: I don't know, that doesn't answer you
17 totally.

18 COMMISSIONER NORMAN: No, we may -- depending on where it
19 goes there may be a pronouncement on it by the courts
20 eventually one way or the other, but anyway thank you and that
21 -- I think that's a good response.

22 CHAIR SEAMOUNT: Thank you, Commissioner Norman. Any
23 further questions, Commissioner Foerster?

24 COMMISSIONER FOERSTER: No.

25 CHAIR SEAMOUNT: Okay. Thank you, Mr. Danenberger,

1 for.....

2 MR. DANENBERGER: Thank you.

3 CHAIR SEAMOUNT:a very thought provoking
4 presentation. Are you planning on hanging around for the rest
5 of the day?

6 MR. DANENBERGER: I will.

7 CHAIR SEAMOUNT: Okay. Good, because we may have
8 questions of you later that may call you back.

9 MR. DANENBERGER: Thank you.

10 CHAIR SEAMOUNT: Okay. At this time before we take a 10
11 minute break I would like to ask my -- our Assistant Attorney
12 General from Alaska, Tab Ballantine, that we have five
13 documents that -- comments that I mentioned earlier, is it
14 appropriate and necessary to enter -- formally introduce these
15 in the record or are they automatically introduced?

16 MR. BALLANTINE: I'd do it formally.

17 CHAIR SEAMOUNT: Okay. Well, then what I'd like to do is
18 read off the titles of each document and if either of the
19 Commissioners have any comments, objections or question about
20 them we could pull them out, but then I would like to have a
21 vote on all five of them at the same time, would that work?

22 (No comments)

23 CHAIR SEAMOUNT: Okay. The first document is from North
24 Slope Borough, Office of the Mayor, Mayor Edward S. Itta. It's
25 regarding Notice of Inquiry by the State of Alaska, Alaska Oil

1 & Gas Conservation Commission, Changes or Additions Needed to
2 AOGCC Regulations Governing Drilling, Rig Workover and Well
3 Control in Offshore and Ultra Reach Wells in State of Alaska,
4 Docket OTH-10-16, 16 pages.

5 Next document is from the Alaska Oil & Gas Association,
6 Comments Regarding AOGCC Inquiry Docket OTH-10-16, Areas of
7 Inquiry on Regulations in Offshore and Extended Reach Drilling.
8 That is six pages.

9 Next document is from ConocoPhillips, subject Docket OTH-
10 10-16, concerning Whether Changes or Additions may be Needed to
11 the Commission's Regulations Governing Drilling, Rig Workover
12 and Well Control in Offshore and Ultra Extended Reach Wells
13 Drilled in Areas of the State of Alaska Under Commission's
14 Jurisdiction. That is six pages.

15 Next document is Memorandum from the Department of Natural
16 Resources, Division of Oil & Gas, from Director William C.
17 Barron, subject Docket OTH-10-16, one page.

18 The final document has been submitted by Kachemak Bay
19 Conservation Society regarding Docket OTH-10-16 and it is 12
20 pages.

21 Do I hear questions, comments?

22 (No comments)

23 CHAIR SEAMOUNT: And if not.....

24 COMMISSIONER NORMAN: I move that the five documents as
25 you have identified be entered into the formal record.

1 COMMISSIONER FOERSTER: Second.

2 CHAIR SEAMOUNT: Any objections?

3 (No objections)

4 CHAIR SEAMOUNT: Hearing none, these five documents are
5 submitted into the record.

6 COMMISSIONER FOERSTER: I wanted to ask Mr. Danenberger a
7 couple more questions.

8 CHAIR SEAMOUNT: Please proceed.

9 COMMISSIONER FOERSTER: Mr. Danenberger, will you get back
10 in the hot seat for me for just a minute longer?

11 MR. DANENBERGER: Yes.

12 COMMISSIONER FOERSTER: I prepared some questions
13 yesterday that I wanted to ask you and.....

14 MR. DANENBERGER: Okay.

15 COMMISSIONER FOERSTER:I finally woke up and
16 remembered them. In your recommendation that there be a relief
17 well plan, what specifics would you recommend requiring in the
18 -- you know, that they actually must provide in that relief
19 plan?

20 MR. DANENBERGER: Well, I think just primarily what rig
21 you would use, where you would -- where you would site it
22 roughly, I mean, what options you might have in terms of rigs.
23 Probably in your case since the operations are either onshore
24 or close to shore, the -- it could be just a land rig
25 somewhere. So it's not like I -- you would necessarily have to

1 have another mobile drilling unit in the area. So I guess
2 primarily what rig you would need to use would be the main
3 thing and where -- roughly where you might site it. In terms
4 of the specifics of the well construction you probably couldn't
5 -- it probably wouldn't be necessary to get into that I
6 wouldn't think.

7 COMMISSIONER FOERSTER: Okay. Switching topics. On BOPE
8 tests you talk about focusing on critical components, what
9 components would you define as the critical components?

10 MR. DANENBERGER: Well, most importantly the rams, of
11 course, and testing your annular and your choke and kill type
12 valves although there's some redundancy there. The -- on your
13 top drive your inside preventor there I think is important, you
14 prime early. And every company -- there's a lot of differences
15 and practices in the way companies perform BOP tests too, I
16 think. It's -- I'm sure your staff has seen a lot of that.

17 COMMISSIONER FOERSTER: And how does the U.S. offshore
18 operations regulators, how do you guys define a failure of one
19 of these critical components?

20 MR. DANENBERGER: Well, if it doesn't hold pressure for
21 the full test interval which is specified in the regs, I'm
22 thinking it's a five minute test. I'm not sure what the exact
23 requirement and duration is, but if it doesn't hold -- if it
24 leaks at all virtually.

25 COMMISSIONER FOERSTER: Okay. And going back to the

1 earlier conversation that we had about gaps and overlaps, in
2 going around the country and the world are you seeing that
3 government entities are doing gas analyzes and is that
4 something that is working, something that should be pursued in
5 this state?

6 MR. DANENBERGER: Well, what you -- what I usually find is
7 that different agencies have different priorities, they even
8 have -- they have different cultures, they have different --
9 very different types of specialists and it's difficult to get
10 -- I think with the Coast Guard we did pretty well in
11 developing the MOU, but you can only take it so far and there's
12 still gaps that -- like several that I showed you as examples
13 there that aren't clearly addressed. So I think the preference
14 is to kind of consolidate.

15 COMMISSIONER FOERSTER: So whether than do a gap analysis
16 combining (indiscernible).....

17 MR. DANENBERGER: That's what they did in Australia and
18 it's.....

19 COMMISSIONER FOERSTER: Okay.

20 MR. DANENBERGER:the Norwegians have done. Now
21 there's some flaws. I don't like the system in the U.K. where
22 they have a very good safety regulator, but then they have a
23 separate pollution prevention regulator. And really it's the
24 same thing, you're looking at the same risks apply by and
25 large. Now you're always going to need -- to me you always

1 need these separate environmental agencies like National Marine
2 Fisheries, NOAA types and Fish & Wildlife Service that are the
3 specialists on the species and all and science and give you --
4 give you opinions on well, you can't set an acre there because
5 you're -- but in terms of actually telling the company what
6 they have to do to be safe and also to prevent pollution, I
7 think that should be one regulatory.....

8 COMMISSIONER FOERSTER: Okay. And what is your opinion of
9 the way it's done in our state?

10 MR. DANENBERGER: You know, I.....

11 COMMISSIONER FOERSTER: You're not.....

12 MR. DANENBERGER:I'm not informed enough, you know,
13 I don't.....

14 COMMISSIONER FOERSTER:you're not going to hurt my
15 feelings.

16 MR. DANENBERGER:I'm not informed enough, you
17 know.....

18 COMMISSIONER FOERSTER: Okay. Okay.

19 MR. DANENBERGER:I don't -- I'm not informed.

20 COMMISSIONER FOERSTER: Okay. I'm done.

21 CHAIR SEAMOUNT: Okay. Okay. Thank you, Mr. Danenberger.

22 At this time -- let's see, it is 9:40 -- no, 10:46. We'll
23 take a nine -- or a 14 minute break. We'll return at 11:00
24 o'clock. Off the record.

25 (Off record)

1 (On record)

2 CHAIR SEAMOUNT: Okay. We're back on the record, it is
3 11:01.

4 And we have our next presenter, Ms. Melinda Taylor, and
5 we're going to recognize that Ms. Taylor was specially invited
6 because of her experience in this matter. And, I guess, when
7 you're addressing a lawyer, is it Ms. Taylor, Esquire?

8 MS. TAYLOR: No, just Melinda in my guise.....

9 CHAIR SEAMOUNT: Okay.

10 MS. TAYLOR:that'll be just fine.

11 CHAIR SEAMOUNT: Please tell us about yourself?

12 MS. TAYLOR: Yeah, I will. Yeah. And thank you, Mr.
13 Chairman, and Commissioners for inviting me up here to comment
14 on these regulations. It's really an honor to be here and a
15 great pleasure to be in Alaska once again, it's my third visit.
16 It was particularly nice getting on the plane yesterday in
17 Austin when it was about 104 knowing that I would get off the
18 plane here to much milder and wonderful conditions.

19 So as the Chairman said I am a professor at the University
20 of Texas in the law school, I teach energy and environmental
21 law courses and I'm the Executive Director of something that we
22 call the Center for Global Energy, International Arbitration
23 and Environmental Law. I've been in the academic world about
24 six years. I've spent most of my career working first for --
25 in the private sector for a private law firm in Washington D.C.

1 called Rice, Wall & Patterson that represents a variety of
2 industrial concerns and has lots of oil and gas clients, both
3 upstream and downstream clients, and I represented them when I
4 was at Rice, Wall. And then I left the private sector and went
5 to work for first the National Audubon Society and then
6 Environmental Defense Fund where I was the Director of the
7 national program that focused on water and wildlife issues, but
8 also had a great deal of interaction with the oil and gas
9 industry.

10 At the Center that I direct at the law school we sponsor
11 research on a whole range of energy issues from oil and gas --
12 environmental impacts associated with oil and gas drilling to
13 renewable issues, siting issues, wildlife that impacts and so
14 forth. And for purposes of the presentation today I wanted to
15 emphasize two projects that we're very much involved in in
16 which we're working collaboratively with other parts of the
17 University, the Petroleum Engineering Department, Department of
18 Geo Sciences, Natural Sciences, Public Policy, where we're
19 analyzing -- the first one is to look at so called
20 unconventional fuels and some of the challenges of producing
21 those and there I'm talking about shale gas, shale oil, coalbed
22 methane, oil shale, even methane hydrates. And we're looking
23 at kind of a life cycle analysis of those fuels, looking at
24 everything from the total quantities available and their
25 potential to meet some of the energy demand that the United

1 States faces to the environmental impacts of harvesting those
2 fuels and transforming those fuels into energy sources that are
3 of use to us, the effectiveness of existing regulations, both
4 environmental regulations and drilling regulations, land use
5 regulations and so on. And we will make a series of
6 recommendations about basically how to facilitate the
7 production of those unconventional in ways that are protective
8 of the natural environment.

9 The second project that we are very much involved in that
10 has some bearing on this inquiry today is a study looking at
11 what we're calling frontiers (indiscernible) unconventional
12 sources of oil and gas and that's looking specifically at ultra
13 deep water issues, drilling in the Arctic and to some extent
14 drilling in sort of other sensitive environments, places like
15 off the coast of Nigeria and in (indiscernible) rain forest in
16 South America and wetland systems around the world and so
17 forth. And there we're engaged in some research with a couple
18 of scientists from MIT that are collaborating with us on that
19 and that project is a little bit longer timeline, but it will
20 also result in a series of recommendations about kind of how to
21 do it right, recognizing that we're moving to those new
22 frontiers.

23 In both of these projects we're grappling with exactly the
24 same sorts of questions that the Commission is dealing with
25 today, you know, how do we as a society ensure that the

1 regulatory framework governing oil and gas exploration and
2 production strikes that right balance between environmental
3 protection and energy development, sort of what set of
4 regulatory requirements is likely to be most effective at
5 preventing a major environmental disaster and ensure safety of
6 workers, but at the same time not stifle oil and gas
7 development. And then in the big picture, sort of the national
8 picture, of how do we best -- what legal framework is going to
9 best enable the United States to meet this goal that we all
10 talk about of energy security with -- however you want to
11 define that.

12 So like Bud did I want to commend the Commission for
13 conducting this review and soliciting input from experts and
14 interested parties. You know, we all know that the Deepwater
15 Horizon incident was epic in scope, it certainly prompted
16 numerous reviews and reevaluations of federal policy and
17 regulations by independent commissions, safety boards, various
18 agencies, congressional commissions and so on. And then also a
19 look by a number of oil producing countries around the world at
20 their particular regulatory regimes just, you know, Canada,
21 Norway, the U.K., Australia, have all had some form of
22 investigation to look at Macondo and how it would -- whether,
23 you know, again this question of is it going to happen here or
24 have we adjusted our regulations sufficiently to ensure that it
25 won't happen here. To my knowledge Alaska's the only state so

1 far to engage in this sort of review. And, you know, I really
2 applaud you for being so proactive. Texas certainly hasn't
3 done it, the Railroad Commission has had some discussions of
4 the Macondo incident, but has not seen the need to look at the
5 Railroad Commission regs in any detail yet. So I do applaud
6 you for doing that, I think it's a prudent thing to do.

7 Now in the Notice of Inquiry for today's hearing, the
8 Commission, of course, has asked specifically for input on the
9 technical aspects of your regulations, the drilling
10 requirements, rig workover, well control and so on. And, you
11 know, it's obvious why you're interested in doing that. I'm
12 not going to comment a whole lot on those technical
13 requirements though because I'm not an engineer by training and
14 even though lawyers like to kind of profess expertise in lots
15 of different areas, I'm not going to tell you that I have the
16 engineering expertise to comment on those. I do think -- I
17 consider myself an expert however on the regulatory framework
18 and structure and how it applies to the industry and how
19 interested parties can participate in that structure. And so
20 the focus of my remarks today is really going to be on the
21 regulatory framework and I'm going to make some recommendations
22 that I think would strengthen your regulations even further.

23 The central part of my recommendations today is going to
24 be that the Commission consider adopting a requirement that
25 operators prepare a safety case, the safety case that Bud

1 talked about a couple of different times in his presentation
2 and that that safety case assessment be a requirement to
3 receive permission to drill, a permit to drill. I really think
4 that's the best mechanism based on, you know, what I've seen
5 around the world and other systems for -- it's not going to
6 necessarily ensure that there's never an accident onshore or
7 offshore and under your jurisdiction, but I think it does give
8 you the best set of tools to try to stave off that sort of
9 accident. And I notice just -- I haven't had the chance to
10 review them thoroughly, but just in looking quickly at the
11 North Slope Borough, the Mayor's comments on today's hearing,
12 that's one of the recommendations that the Mayor made in his
13 comments as well.

14 So as I was saying as you well know there have been a
15 number of investigations into the causes of the Deepwater
16 Horizon blowout and, you know, looking at why it took three
17 months to staunch the flow of oil. BP conducted its own
18 internal investigation that concluded a year ago, the National
19 Academy of Engineering and National Research Council issued an
20 interim report some months ago, BOEMRE did first the analysis
21 on the blowout preventor specifically and then yesterday
22 released the more comprehensive report that it conducted with
23 the Coast Guard, the U.S. Chemical Safety & Hazard
24 Investigation Board investigated the causes of the incident
25 and, of course, the Gulf Oilspill Commission that the President

1 appointed held a series of public hearings, did an extensive
2 amount of background research and released its report last
3 January. All of those reports identified various technical
4 problems, issues that were the direct cause of the blowout at
5 Macondo, the cement failure was a significant one as Bud
6 discussed and there were -- you know, the failure of the
7 negative pressure test, et cetera. But in addition to all the
8 equipment failures something that all those reports have in
9 common is the fact that they concluded that some degree of
10 human error, human mistake, especially with respect to the
11 crew's assessment of and response to the possibility of an
12 explosion was a central cause of the accident. The President's
13 Commission in particular concluded that despite the technical
14 issues on the rig, the Macondo disaster was not inevitable, the
15 blowout happened and I quote, because a number of separate risk
16 factors, oversights and outright mistakes combined to overwhelm
17 the safeguards meant to prevent such an event. The team,
18 meaning the research team, was able to trace all of these
19 failures back to an overarching failure of management, better
20 management of personnel, risk and communications by BP and its
21 contractors would almost certainly have prevented the blowout.
22 The Commission concluded that BP did not fully appreciate all
23 the risks that Macondo presented and it also failed to
24 adequately manage the contractors as we've discussed, but their
25 basic conclusion was that human error, not just equipment

1 failures, caused the blowout.

2 My -- I have to apologize my Power Point was done a little
3 bit at the last minute so I don't have a lot of good,
4 interesting slides, but at least there's a little bit of visual
5 to breakup the presentation.

6 So not only was human error a problem at the Macondo
7 blowout, but if you look at the causes, sort of the root causes
8 of virtually all industrial accidents I think it's we -- you
9 know, nobody would dispute the fact that they're always caused
10 at least in part by human error. You're not going to have a
11 major human or major blowout or major explosion in an
12 industrial facility if everything is running exactly in
13 accordance with the regulations in place and with the operation
14 procedures that the company has outlined and things are
15 adequately managed and people are booking along, there's always
16 some degree of human error. The BP oil refinery in Texas City,
17 Texas in 2005, that was a horrible event, clearly was caused in
18 large part by failure on the part of management and employees
19 to do what they were supposed to be doing. The Piper Alpha
20 explosion that we talked about earlier in Scotland, the capsized
21 of the Alexander Kielland rig in Norway, all of these accidents
22 can be linked at least in part to some degree of human
23 shortcoming, management shortcomings, lack of training for key
24 personnel, erroneous operational decisions and so on. So while
25 it's absolutely necessary to make sure that the regulatory

1 standards that the Commission enacts or modifies as well as the
2 federal standards impose equipment and operational requirements
3 that will minimize the chance of accidents or releases, it's at
4 least as important to design a regulatory system that is going
5 to address this risk of human error and minimize that risk of
6 human error. So I believe a critical question for you to
7 consider is how to ensure that the state's regulatory program,
8 once you've made the tweaks and adjustments that you feel like
9 you need to make after today and tomorrow's hearings and input
10 that you receive from others is designed to minimize that
11 possibility of human error and encourage the very best
12 practices on the rig. And I do believe that imposing the
13 safety case requirement would be an important step in that
14 regard.

15 The very nature of the oil and gas industry as I've come
16 to understand it is I am continually impressed with the
17 industry, frankly the more people I meet that actually work in
18 the industry and are managers in the industry, is that it's
19 incredibly technologically driven, it's an industry that's
20 undergone and is -- continues to undergo tremendous
21 technological advances. In Texas and elsewhere in the country
22 we've seen this just amazing proliferation of drilling for
23 shale gas and shale oil, that's an activity that wasn't
24 possible technologically or economically feasible even just a
25 few years ago, but now it is because of the advent of -- or the

1 -- not the advent of, but the better execution of hydraulic
2 fracturing and horizontal drilling certainly. And obviously
3 the industry has made enormous strides in extended reach
4 technology which I know is one subject of particular interest
5 to you, and in methods that are used to drill in very deep
6 water in the Gulf and elsewhere.

7 So as the industry continues to evolve I would put forward
8 that the regulations can only do so much to keep up with that.
9 I mean, technology evolves, thereby the risk change, the
10 environmental risk change, the safety risk change. Sometimes
11 the risk are diminished, but they're going to change whether
12 they're diminished or not and it's very difficult for a
13 prescriptive regulatory system to keep up with those changes,
14 you're always going to be two steps behind, it's just the
15 nature of the game.

16 So whatever framework is ultimately adopted by regulatory
17 agencies like the Commission, it needs to incentivize this
18 notion of best practices or we would call it in the natural
19 resource context adaptive management so to speak. So I really
20 think that a system where -- that promotes the use of strong,
21 sort of best practices, probably that prescriptive regulatory
22 floor has to be coupled with this notion of a safety case
23 because that gives you the ability to go beyond the minimum.

24 So that brings me back to the safety case. And after
25 looking -- spending substantial amount of time looking at the

1 safety case as it's written and implemented in the United
2 Kingdom, Norway, Australia and even Brazil, and reading the
3 reports on the causes of the Macondo accident I really think
4 that this sort of safety case worse case scenario planning is
5 critical to minimizing the risk of major accidents. Merely
6 requiring operators to go through the exercise of preparing and
7 thinking through all elements of their operation and every
8 aspect of a major blowout, a major release, and then evaluating
9 what would the impacts of that release be, what would our
10 response be, how quickly could we respond and so forth, I'm
11 just convinced that you're going to end up with a system that
12 -- where everybody on that rig is better informed and better
13 equipped to deal with it.

14 The U.S. Chemical Safety & Hazard Investigation Board held
15 a hearing last December, nine months ago, that focused
16 primarily on oil and gas regulations in other countries and
17 looked at some depth at how the safety case worked in Norway,
18 Australia and the UK and the Canadian Maritime Provenances and
19 speaker after speaker from those countries affirmed the fact
20 that the safety case requirement yes, it can be cumbersome at
21 times, not everybody in the industry embraces it happily, but
22 they were convinced that it has led to a safer operating
23 environment.

24 So the elements of the safety case as they're -- as
25 they've been laid out in -- and these are elements that all of

1 those jurisdictions have in common although, of course, every
2 jurisdiction implements this differently and has different
3 specifics associated with it. And the first is that the
4 operator must provide a very detailed description of the
5 facility. And that's every aspect of the facility, the
6 equipment, the age of the equipment, the type of equipment and
7 so forth, the crew that's working on the facility, how
8 operations are carried out, of course, information about the
9 types of chemicals that are used. This stage very much can
10 incorporate the reference to those standards that are part of
11 the Commission's regulations or rules which, you know, in turn
12 are going to be industry standards in many respects and that's
13 entirely appropriate. But it's a very -- it's a site specific
14 application of the regulations that are going to be used there.

15 The second piece is really the heart of the safety case
16 and that is what could go wrong, you know, what could happen on
17 this rig or at this facility. And safety cases are used in
18 Europe, they're required at other types of industrial
19 facilities, not just oil and gas operations. What could
20 possibly go wrong, what's the potential worst case. And the
21 operator's required to carry out a systematic assessment of the
22 nature of the event in the worst case, in the case of a
23 blowout, a major release of oil. Questions like how much oil
24 could be spilled, where would it go, what resources would be
25 affected, how many people might be impacted and so on.

1 The third piece is the identification of control systems
2 that would be -- that the operator would propose to have in
3 place to respond to that worst case, to that terrible disaster.
4 So this is where you talk about the preventative technology,
5 blowout preventors, et cetera, emergency cutoff equipment, as
6 well as the training and the emergency response protocols that
7 the operate -- that the rig workers are -- have been trained to
8 carry out and execute. So you deal here with both the
9 operational side as well as the equipment side. And once again
10 those control systems, there's no reason that this should be
11 outside of industry norms or, you know, it's not -- I'm not
12 proposing something that would be some level of rigor that's
13 not currently considered good industry practice. I'm just
14 merely assume -- what I'm asserting instead is that the
15 operator should have to analyze what particular techniques
16 would be most appropriate in a given situation.

17 And then the fourth element, and this is the difficult
18 piece, I think, for a regulatory agency because it does -- it
19 requires the existence of a good, large staff. You all have a
20 very good staff, but it's a issue of capacity and whether
21 you've got the capacity to review these. But the last piece is
22 that the safety case would be submitted to the regulator,
23 evaluated by the regulator and approved before the permit to
24 drill would be issued.

25 Australia has tweaked this aspect of their safety case

1 requirement since it was first implemented. They found in the
2 -- for a number of years when they first imposed the safety
3 case requirement that the industry was putting forward a pretty
4 bare bones safety case to the regulators and then kind of
5 relying on the regulators for engineering support and help.
6 And the Australian regulatory agency decided that was not an
7 acceptable or sustainable way of doing business so they began
8 rejecting those plans and instead requiring much more detail
9 from the operators. And that's a -- you know, that's a
10 question of balance and resources obviously.

11 And then once the safety case has been approved by the
12 regulator, of course, it's up to the agency to monitor the
13 implementation of that. Each of these countries has a
14 requirement that the safety case be updated periodically. In
15 the UK that period is every five years.

16 Just briefly the origins of this requirement for the
17 safety case, it actually can be traced back to Seveso, Italy, a
18 big explosion at a gas plant in 1976 that affected hundreds of
19 people. And the European Commission after that event issued a
20 directive recommending to its member countries that they should
21 enact this safety case requirement for all industrial
22 operators. The United Kingdom adopted this safety case
23 requirement for onshore operations in 1984, but it wasn't until
24 after the Piper Alpha explosion in 1988, and this is a picture
25 of the Piper Alpha rig, that it extended the requirement to

1 offshore operations. Australian states adopted the safety case
2 requirement for offshore operations after Piper Alpha as well,
3 before the Montara accident actually. And then Norway also has
4 a version of the safety case which it had adopted after the
5 Alexander Kielland incident in 1980. So their requirement
6 preceded the UK's.

7 So proponents of the safety case emphasize the fact that
8 it's a way to move away from a purely prescriptive set of
9 regulations for the industry or at least to give the best
10 players in the industry -- one could structure the safety case
11 requirement so that you give operators with a very good safety
12 record more flexibility with respect to adhering to the
13 prescriptive standards provided they can make the case in a
14 safety case that they will be able to respond to the worst
15 conceivable accident. It's a way of showing some flexibility,
16 you know, we talk a lot about command and control versus goal
17 oriented or performance based regulations. The safety case can
18 be a way of balancing those two extremes from a regulatory
19 perspective, again because the notion of having some minimum
20 set of prescriptive standards perhaps with flexibility built in
21 for the best operators, but requiring this planning exercise on
22 top of it. So the idea is that rather than apply cookie
23 cutter, one size fits all solution to every rig and every
24 facility to reduce the risk of spills and accidents again is
25 that idea of the individual operator assessing the particular

1 risk that are associated with their particular operations at
2 their specific location and then putting systems in place to
3 address those risk. I think this can be particularly valuable
4 when you're talking about conditions that are novel or
5 challenging or different, but it can be of tremendous value
6 across the board.

7 Now in the UK and elsewhere operators are required to
8 consult with external stakeholders in the formulation of the
9 safety case. Obviously the requirement could be written in
10 lots of different ways. I think generally speaking all of
11 these jurisdictions require some input at least from the
12 workforce, the rig workers, when the safety case is formulated,
13 but the extent to which that was also open to comment from
14 external operators would be up to you.

15 Now the idea obviously of identifying risks at a facility
16 and planning to prevent them is not a new idea, you know,
17 OSHA's got a process safety management standard which applies
18 to upstream oil and gas operations that requires an assessment
19 of potential risks at refineries and other facilities, but
20 there is not in the United States a requirement in place that
21 has the comprehensive approach that the safety case would
22 implement. And again with this general idea that the operator
23 needs to demonstrate, needs to prove, that the systems and
24 training programs and all the rest of it are in place to guard
25 against the worst affects of an industrial accident.

1 The rest of the world seems to be moving to a safety case.
2 Brazil has moved to a safety case requirement again with the --
3 layered on top of a set of prescriptive requirements for its
4 offshore operations. The Canadian Maritime Provenances have
5 done the same, Norway, the UK and Australia as I've talked
6 about.

7 Now some of these -- some of the objections and criticisms
8 I wanted to touch on to the safety case because they're
9 legitimate, I believe, and should be considered if the
10 Commission wants to evaluate the possibility of going in this
11 direction. I mean, the challenge with any requirement that's
12 essentially a planning requirement, and this is essentially a
13 planning requirement, you know, I -- it's -- one could compare
14 it to an EIS required under NEEPA or even in a (indiscernible)
15 prevention and control plan is that plans, you can prepare them
16 with the best of intentions, but they can end up as a doorstep
17 or sitting on somebody's shelf and with very little impact on
18 day to day operations. And I'm cognizant of that, that's been
19 one criticism particularly of the UK safety case, apparently
20 those documents have grown to be 400 pages, 500 pages, for a
21 typical mid-size rig in the North Sea and that strikes me as
22 crazy and ridiculous. This would be worthless if it became
23 just a paper exercise that operators particularly -- especially
24 if operators just hire a consultant to go through a checklist
25 and come up with provisions for a safety case and plug them all

1 in and that's that.

2 It doesn't have to be that though and you can imagine
3 structuring a requirement for a safety case that's tailored to
4 the industry concerns and your -- the resource concerns in the
5 state of Alaska that would be much more streamlined, but that
6 would contain those particular elements of identifying what's
7 the worst that can happen out here and how are we going to
8 respond to it. And forcing the operators to go through that
9 analysis of how are we going to respond, do we have the
10 equipment to respond and what's the worst that could happen.

11 I have talked to operators in the North Sea in particular
12 a long conversation with someone from Shell about a month ago
13 about the safety case in the UK. And while he doesn't like the
14 cumbersome aspect of the requirement and he's one of the people
15 amongst a number that I talked to that complained about the
16 lengthy documents that are produced, he said that in his
17 opinion it had made a significant difference in their industry
18 culture and in the way that they think about risk and drilling
19 in that environment. And he thought that the net benefit to
20 that was positive. And that result is echoed by others as
21 well.

22 Another criticism of the safety case that's often raised,
23 especially with respect to the implementation in the UK, is
24 that the contents are confidential, they're not available to
25 the public. And environmental (indiscernible) have concern

1 about that for obvious reasons. You know, I'm not going to say
2 a whole lot about that today except that, of course, you don't
3 have to design a system that would -- where everything in a
4 safety case would be confidential. And, in fact, in the United
5 States we've got this strong tradition of information being
6 available, you know, permitting information, information about
7 releases and discharges that one submits to EPA and state
8 regulatory agencies being publicly available so there's nothing
9 inherent about a safety case that means it needs to be a
10 confidential document or at least not everything in it should
11 be confidential.

12 There's a considerable amount of interest in this notion
13 of a safety case among lots of different experts and interested
14 players. The President's Oilspill Commission recommended that
15 BOEMRE move toward a safety case requirement. BOEMRE has
16 indeed issued a notice to lessees, it's in the N06 NTL that was
17 issued in June of 2010 that requires that new wells and wells
18 in deep water submit information regarding a blowout scenario
19 and a worse case discharge scenario which are certainly key
20 elements of the safety case. And in doing that BOEMRE was
21 rescinding an NTL that had been issued in 2008 that had
22 actually limited the amount of information that operators had
23 to provide to BOEMRE. So now the information required includes
24 measures that the operator would use to prevent the blowout,
25 again intervention measures in the event that one occurred,

1 including drilling relief wells. Now this requirement in the
2 new NTL has been heavily criticized by the industry primarily
3 because it, you know, not surprising is contributing to a
4 delay, I think that's hard to dispute, in the approval of
5 drilling permits and the resumption of drilling in the OCS. So
6 again it's that tradeoff.

7 Now the NTL is not exactly a safety case, there's not the
8 -- BOEMRE has not proposed at this point that operators be
9 required to assess every aspect of their operation the way one
10 would in a -- under a safety case requirement, but it is a
11 significant piece of that.

12 And then I'll just end by saying in the course of
13 preparing for the hearing I reviewed your regs and I'm not an
14 expert on the engineering components of them, but I compared
15 them to the Texas Railroad Commission regs which I'm very well
16 familiar with and looked at the Mississippi regs and the
17 Louisiana regs because they seem to me relevant for this
18 discussion. And in many respects the Alaska regs are more
19 stringent than the Gulf coast state oil and gas drilling
20 regulations especially with respect to the blowout preventor
21 requirements that are in your regulations and some of the spill
22 and release reporting requirements because you do -- you've got
23 requirements for reports of fairly minimal -- comparatively
24 minimal releases. So while I'm hesitant to go out on a limb
25 with this, I -- you know, overall I think there's a lot --

1 there are a lot of really good things in your regulation from a
2 stringency standpoint. I'll defer to others to make those
3 specific recommendations about how to improve them, but I do
4 believe that adding this safety case requirement or some
5 version of it would enhance significantly the overall safety
6 that the regulations ensure for the public and for the
7 environment. And I think it would also induce this -- a bit
8 more flexibility and adaptive management -- best management
9 approach by the industry to encourage innovation.

10 So I'm going to conclude by thanking you again for the
11 opportunity to be here. I do -- I agree with everybody who
12 said how important this topic is, it's vitally important and I
13 really applaud you for taking it on and I'm happy to answer any
14 questions. We're probably finished a little early for lunch
15 so.....

16 CHAIR SEAMOUNT: Thank you, Ms. Taylor. Commissioner
17 Norman, do you have any questions, comments?

18 COMMISSIONER NORMAN: I do. Thank you for a very
19 interesting presentation. I'll start out with the safety case
20 just trying to.....

21 MS. TAYLOR: Right.

22 COMMISSIONER NORMAN:get the benefit of your
23 experience with it. I believe I understood you to say that
24 Australia in moving toward the safety case -- as part of the
25 safety case has either a requirement or a practice to consult

1 with stakeholders, other stakeholders?

2 MS. TAYLOR: Yes.

3 COMMISSIONER NORMAN: How and if in implementing a safety
4 case approach that contemplated consulting with stakeholders,
5 how do you balance often an operator's proprietary interests?

6 MS. TAYLOR: Yeah, I think that's a very important
7 question and, of course, people are going to disagree about,
8 you know, how much of what an operator says is proprietary
9 should, in fact, be protected as proprietary. I do believe
10 that it would be possible to structure some input so that the
11 operator is not required to disclose specific information
12 about, you know, whether it's drilling mud composition or
13 particular design techniques that the operator's developed for
14 a given formation that it wants to keep out of the public eye,
15 I don't know that that -- the emphasis could much more be on
16 the protective side of the equation, what measures -- giving
17 the public information about what protective measures, training
18 techniques and that sort of thing are being planned for that
19 facility. In other words the drilling piece, the how am I
20 going to get the resource out of the ground could more or less
21 -- not everybody might agree, but more or less be kept out of
22 the public domain, but in the public domain would be some
23 discussion, some robust discussion of the environmental
24 protections that are in place. That might be one way to deal
25 with it, sometimes the line is difficult to draw, but.....

1 COMMISSIONER NORMAN: Mr. Chairman, I'd like to continue
2 with my questions.

3 CHAIR SEAMOUNT: You may. Go ahead.

4 COMMISSIONER NORMAN: If you know the experience that
5 other jurisdictions have had perhaps in moving toward or
6 incorporating a safety case, our minds here because there are a
7 lot of practical questions that come to mind, do you have to
8 add additional staff, if you do, where are you going to put
9 them.....

10 MS. TAYLOR: Right.

11 COMMISSIONER NORMAN:how are you going to pay for
12 it, what are the time requirements for processing permits.
13 None of these should interfere with good enforcement and
14 overseeing safety.....

15 MS. TAYLOR: Right.

16 COMMISSIONER NORMAN:but I would be interested in
17 what the experience of other jurisdictions has been in that
18 regard.

19 MS. TAYLOR: Well, and I think that's another good point,
20 Mr. Commissioner. One of the experts who's looked at this
21 extensively from Australia, Andrew Hopkins who's a professor at
22 Australian National University, has emphasized that a safety
23 case regime works only when the agency has sufficient people,
24 resources, to review it. Now again I think in this context I
25 don't think the perfect should be the enemy of the good. I

1 think the Commission could adopt and, in fact, we're -- well, I
2 think the Commission could adopt a requirement of a safety case
3 light so to speak, something that you can accommodate with your
4 staff or with some addition of staff that does not require the
5 operator to produce a 400 page document that's going to delay
6 permitting for six months or something like that, but that
7 would achieve this goal of having -- incentivizing or encourage
8 -- or requiring the operator to go through the exercise of
9 assessing risk and identifying all the potential responses to
10 that risk. So it's a matter of how you design the requirement,
11 whether you go full bore to the UK system which is an extremely
12 cumbersome one or something that's a more modest step to try to
13 achieve that additional planning and input from the industry.
14 You know, I'm not a fan of paper exercises for their own sake,
15 I think you have to be practical about this and figure out what
16 the agency can best accomplish.

17 COMMISSIONER NORMAN: In the course of the inquiry
18 conducted by the National Commission, I can't remember if it's
19 addressed anywhere, but I do know in their proceedings it was
20 raised, the question was raised about considering the track
21 record of individual operators and.....

22 MS. TAYLOR: Yeah.

23 COMMISSIONER NORMAN:the word that came to be mind
24 is debarment which is common in federal contracting law.....

25 MS. TAYLOR: Right.

1 COMMISSIONER NORMAN: if you have a particular bad
2 actor a while, you know, I know in federal practice that
3 contractor is told you're no longer welcome to bid on these
4 projects. Do you have any thoughts on whether that has a place
5 in regulations to look at the track record of a particular
6 operator?

7 MS. TAYLOR: I -- yes, sir, sir, I do. And in Texas the
8 -- on the environmental permitting side, the compliance history
9 is what we call it in Texas, but the compliance history of a
10 permit applicant, an industrial permit applicant, is very much
11 an issue when that facility or that operator desires to get a
12 new permit for whatever it might be, you know, a do air permit
13 or water discharge permit or what have you, so there's
14 precedent for that. Now I think as Mr. Danenberger was saying
15 in this context it's a little difficult to implement a
16 requirement like that because you may not have a data base
17 that's sufficient to give you the information you need to
18 decide who's a good actor or who's a bad actor, I mean, you've
19 got, you know, the worst actors because they presumably been
20 subject to prosecution or enforcement action, but there may be
21 other industry players who just have a -- you know, not --
22 they've had a number of equipment failures or, you know,
23 difficulties with training personnel that have led to releases
24 or whatever that you may not have as much information about.
25 So that's one constraint about that sort of approach, but there

1 are precedents for looking at compliance history and sort of
2 one's record in deciding whether to issue a permit.

3 COMMISSIONER NORMAN: Thank you. Have you had an
4 opportunity to review the Chief Counsel's report from the
5 National Commission that came out?

6 MS. TAYLOR: Yes.

7 COMMISSIONER NORMAN: Now this is a very broad question
8 and so -- but I'm going to ask does anything stick in your mind
9 in that report that you disagreed with, any.....

10 MS. TAYLOR: I would -- not off the top of my head, I'd
11 need to go back and look at it, I'm sure I don't agree with
12 every last instance of it. But no, I can't -- there's nothing
13 that comes to mind that I would point to.

14 COMMISSIONER NORMAN: Okay. The Joint Investigative Team
15 that just came out, they categorized certain occurrences as
16 causes, they then identified a category of contributing
17 causes.....

18 MS. TAYLOR: Uh-huh.

19 COMMISSIONER NORMAN:and then they had a third
20 category of possible contributing causes. Would you agree that
21 this is a proper method of trying to classify the various
22 events that may have led up to this tragedy?

23 MS. TAYLOR: Well, I've only skimmed the report since it
24 came out yesterday, I have a copy of it in my briefcase and I
25 looked through it quickly and read a couple of press reports

1 about it so I'd need to -- I'll need to look at it more closely
2 before I give you a definitive answer on that. You know, I
3 don't know that one -- that it may be as useful as anything
4 else. I mean, I think though it boils down to -- I might
5 characterize it differently, I might talk about something like
6 a direct cause or something like that, I don't know how useful
7 it is to talk about a probable cause or maybe possibly that
8 might have kind of been a problem, I don't know how useful that
9 in. But without really studying the report it's hard for me to
10 say much more about it than that. I'd be interested in your
11 reaction to that though, what did you -- did you have an
12 opinion of how it was categorized?

13 COMMISSIONER NORMAN: It's a thick report as you know.....

14 MS. TAYLOR: Yeah.

15 COMMISSIONER NORMAN:so we're still all of us wading
16 through it. The -- I have a question and it's similar to the
17 one that I put to Mr. Danenberger. If a regulatory agency
18 incorporates by reference.....

19 MS. TAYLOR: Yeah.

20 COMMISSIONER NORMAN:some -- a national standard,
21 but when you refer to that national standard it says we
22 recommend or within your discretion use such and such.....

23 MS. TAYLOR: Right.

24 COMMISSIONER NORMAN:does the incorporation of that
25 what could arguably be a discretionary standard become

1 mandatory by virtue of the incorporation?

2 MS. TAYLOR: Yeah, I was thinking about this question and
3 you're an attorney I know so you probably have a view on this
4 as well. I think I -- my view is the same as Mr. Danenberger's
5 that if you're incorporating by reference an industry standard
6 that describes a certain set of procedures, ways of operating,
7 no matter how those are phrased within that industry standard I
8 believe that makes those industry requirements mandatory. And
9 I think you can avoid that problem though by simply
10 incorporating the language that you want to be incorporated
11 into your primary regulation rather than doing it by reference
12 and using the word shall in -- you know, in place of we
13 recommend or suggest or what have you. But I do believe that
14 just as a legal matter when you incorporate some standards that
15 are in an industry practice manual that makes them mandatory.j

16 COMMISSIONER NORMAN: The question that I'd be interested
17 if you have an opinion on as the nation builds further out into
18 what you've identified -- I'm taking -- I'll just say into
19 deeper and deeper water, are we by virtue of that -- let me
20 back up and rephrase this for you. There are certain petroleum
21 deposits that we know of onshore.....

22 MS. TAYLOR: Right.

23 COMMISSIONER NORMAN:that can be developed without
24 the risk of pushing out into deeper and deeper water. Do you
25 have a thought on whether as a nation we are creating some of

1 the problem by forcing this industry to go deeper and deeper
2 and yet putting off limits some of these onshore deposits?

3 MS. TAYLOR: Well, I -- if I -- it's a pretty loaded topic
4 to start by talking about the Arctic when I'm sitting in
5 Anchorage doing that. I -- let me answer it a little
6 differently than the way you phrased it. I -- my views on
7 drilling in the Arctic I'll say have changed to some extent.
8 And so -- and I was at an environmental group for a long time
9 so you can imagine what -- how I used to feel. I'm not
10 advocating opening up the Arctic though, I'm not here to take
11 that position. I will say after traveling around the world and
12 seeing drilling taking place in Brazil, in Africa, and the
13 conditions and looking at the requirements that are in place in
14 some of these very sensitive ecosystems, I think that it's --
15 Americans have certain luxury let's say in saying we're going
16 to keep areas off limits to drilling because we don't want our
17 own areas to be compromised. I mean, the fact is we're
18 importing oil from all over the world that's produced in areas
19 that are very environmentally sensitive. I'll go on to say
20 however that I -- you know, I think the long term answer is
21 conservation, better use of our resources, reducing our
22 dependence on oil generally, et cetera. So I think that's the
23 long term answer. And anyway I do think it's a balancing act
24 and as global citizens, maybe this is too philosophical, but we
25 have an obligation to look at those impacts by a diversity in

1 the environment around the world. So that's how I'd answer
2 that.

3 COMMISSIONER NORMAN: Sure. Well, that's a fair answer.
4 I think that's all the questions I have.

5 CHAIR SEAMOUNT: Thank you, Commissioner Norman.
6 Commissioner Foerster?

7 COMMISSIONER FOERSTER: Well, you'll be relieved to know
8 that I'm not a lawyer so I won't ask any of those types of
9 questions. But I'm going to ask you the same one that I asked
10 Bud, you said that when you reviewed our regs that you saw that
11 we were stricter in a couple of areas. Did you notice any
12 gaps, did you notice gosh, Louisiana requires this and AOGCC is
13 silent on that?

14 MS. TAYLOR: I -- not with respect to Louisiana, but.....

15 COMMISSIONER FOERSTER: Well, I was using Louisiana as an
16 example, but.....

17 MS. TAYLOR:I'm not -- you know. I was born in
18 Louisiana so, you know, I love Louisiana, but I didn't see any
19 gaps compared to Louisiana regs.

20 COMMISSIONER FOERSTER: But other places.

21 MS. TAYLOR: But other places. You know, I didn't -- I'm
22 going to say I don't know your regulatory program well enough
23 to answer that. I think that the point Mr. Danenberger made
24 about this -- the overlap in jurisdictions though is one to be
25 really careful about. And like Mr. Danenberger I don't feel

1 like I know -- I know I don't know your agencies well enough
2 and how you operate on a day to day basis with folks at DNR and
3 DEC to know how that coordination plays out, but that is -- you
4 know, that's always the issue. In Texas the regulatory -- the
5 Railroad Commission which regulates oil and gas development in
6 the state actually has the authority to administer the
7 environmental programs that EPA has delegated so the Clean
8 Water Act and the Clean Air Act, actually the Railroad
9 Commission has the authority to implement in Texas. But
10 there's still -- you know, there's still areas where there's
11 overlapping jurisdiction among the agencies and probably as a
12 consequence some things are getting lost in the -- falling
13 between the cracks, but I can't -- I wish I knew your regs and
14 your program well enough to give you some specific examples
15 about that.

16 COMMISSIONER FOERSTER: Okay. Would it be fair to say
17 that regardless of how well a current set of regulators work
18 together the fact that overlaps exist create a risk?

19 MS. TAYLOR: Yeah, I think so. Yeah, I think so.

20 COMMISSIONER FOERSTER: Okay.

21 MS. TAYLOR: One of the conclusions that we're definitely
22 reaching as we look at -- well, both at the potential for
23 drilling in the Arctic through this -- the frontier project
24 that I mentioned and also this unconventional project is --
25 you know, again you're struck by just this multilayered,

1 especially at the federal level there are so many different
2 agencies that have jurisdiction over activities in a given area
3 and that are regulating so many different facets of it. And I
4 agree, you know, the -- as a -- if I were an operator and many
5 operators are very sophisticated clearly and they know how to
6 navigate those regulatory waters, but it shouldn't be -- one
7 shouldn't require a law degree to sit down and figure out what
8 regulations apply or who should I call if I've got a question
9 about this. It's just it's very, very complicated at this
10 point.

11 COMMISSIONER FOERSTER: I only have one more question and
12 it's a question that came from a member of the audience,
13 Captain Cromryan (ph) who works for the BOEMRE and whose
14 daughter is one of my favorite UT fans. The question is are
15 you familiar with APIRP-75?

16 MS. TAYLOR: I don't know that I am.

17 COMMISSIONER FOERSTER: Which.....

18 MS. TAYLOR: Yes.

19 COMMISSIONER FOERSTER:there was a follow-up
20 question if the answer was yes, but.....

21 MS. TAYLOR: Okay. All right.

22 COMMISSIONER FOERSTER: Okay. Thank you.

23 MS. TAYLOR: Sorry.

24 COMMISSIONER FOERSTER: That's all I have.

25 CHAIR SEAMOUNT: Thank you, Commissioner Foerster. Ms.

1 Taylor, you mentioned shale gas and coalbed methane and all the
2 new technologies involved in that. Would you recommend that
3 there be differences in the regulation between these
4 unconventional reservoirs and convention reservoirs?

5 MS. TAYLOR: Well, I think the -- not entirely, there
6 doesn't need to be an entirely different regulatory regime
7 certainly, but there are specific threats that are posed by
8 fracking in some formations, I mean, it's not even true in
9 every formation, but the questions becomes how are you going to
10 address those specific issues. And the two are the possibility
11 of migration of gas, you know, up the well bore into water
12 supplies or the migration of chemicals that are used in the
13 fracking fluids. Right now there's nothing in the regulatory
14 framework that addresses those two issues specifically so the
15 question is is that a gap, should it be addressed or not and
16 we're still evaluating that. So I -- I don't propose a
17 completely different framework, I just -- the -- but rather to
18 look at whether there are particular threats, particular safety
19 concerns possibly that are posed by a given practice and how
20 you address those.

21 CHAIR SEAMOUNT: Okay. The reason I ask that is there was
22 a huge brew-ha-ha over coalbed methane in Alaska.....

23 MS. TAYLOR: Yeah.

24 CHAIR SEAMOUNT:a few years ago and the Legislature
25 came up with a change to the statute where unconventional gas

1 would require a baseline water test so far around each
2 well.....

3 MS. TAYLOR: Yeah.

4 CHAIR SEAMOUNT:and, you know, coalbed methane --
5 coal is basically just another reservoir so why wasn't it done
6 for all and I.....

7 MS. TAYLOR: Yeah.

8 CHAIR SEAMOUNT:I would think that an operator just
9 to protect themselves would do a baseline test no matter what
10 kind of well they're going to develop.

11 MS. TAYLOR: Right.

12 CHAIR SEAMOUNT: The next thing was you mentioned best
13 practices and I've always had difficulty with that because.....

14 MS. TAYLOR: Yeah.

15 CHAIR SEAMOUNT:you know, Alaska's in a lot of ways
16 different than other parts of the world and so when you talk
17 about best practices would they be for specific areas,
18 specific.....

19 MS. TAYLOR: Yeah.

20 CHAIR SEAMOUNT: Okay.

21 MS. TAYLOR: I think they have to be for exactly that
22 reason because this environment is very different from
23 operating in Texas or in the Gulf of Mexico or -- yeah.

24 CHAIR SEAMOUNT: Okay. And finally do you ever deal with
25 the Interstate Oil & Gas Compact Commission?

1 MS. TAYLOR: Yes.

2 CHAIR SEAMOUNT: Okay. Because they're real good about
3 communicating.....

4 MS. TAYLOR: Yeah.

5 CHAIR SEAMOUNT:comparing regulations and things of
6 that matter.

7 MS. TAYLOR: Yeah, I've worked with the IOGCC actually on
8 several of their comparative studies, one many years ago
9 looking at how states dealt with oil and gas waste, production
10 waste at the state level and then since then we just finished
11 working with them on a study of regulations that might pertain
12 to the injection of CO2 for long term carbon storage and which
13 states have some sort of regulatory program in place to deal
14 with that. So yeah, they do -- it's a good information source
15 and source of comparative information.

16 CHAIR SEAMOUNT: Okay. Thank you. Do we have any more
17 questions?

18 COMMISSIONER FOERSTER: Yes, we do. I have two more
19 questions.

20 MS. TAYLOR: Sure.

21 COMMISSIONER FOERSTER: First this thing with the IOGCC
22 thought, that was something that went through my mind when you
23 were talking about the states haven't done this kind of
24 analysis and.....

25 MS. TAYLOR: Yeah.

1 COMMISSIONER FOERSTER:the state's looking to go to
2 a safety case, you know, based on what you know about the IOGCC
3 do you think that would be a good resource or platform.....

4 MS. TAYLOR: It could be.

5 COMMISSIONER FOERSTER:for the states to evaluate a
6 safety case framework?

7 MS. TAYLOR: Yeah, I think that's a terrific idea. I
8 should have thought of that, but I think that's a great idea.

9 COMMISSIONER FOERSTER: Okay. And.....

10 MS. TAYLOR: They would have the resources to do that.

11 COMMISSIONER FOERSTER:and then second you talked
12 about some areas fracking is a danger because of fluids
13 migrating up the well bore. I -- first I want to applaud that
14 you recognize that the migration occurs up the annular space in
15 the well bore and not that it -- it occurs over 5,000 feet of
16 hard rock. But second, I wanted to disagree with you and
17 question you on where you got the statement that there are no
18 regulations in place.....

19 MS. TAYLOR: No.

20 COMMISSIONER FOERSTER:because you've looked at our
21 regulations and we require cement which is.....

22 MS. TAYLOR: Right.

23 COMMISSIONER FOERSTER:what takes care of that
24 annulus. So I would argue that those regulations are already
25 in place and I just wonder where.....

1 MS. TAYLOR: Yeah. No. And I.....

2 COMMISSIONER FOERSTER:what you're basing your
3 statement on?

4 MS. TAYLOR:I probably overstated what I was talking
5 about. What I was referring -- what I was thinking about when
6 I said that was that the Class II regulations under the UIC
7 program exclude the fracking process from the classification,
8 the requirements that apply to Class II wells. But no, I
9 completely agree with you, in Texas there are plenty of regs in
10 place too that would protect that migration from happening. In
11 fact, I -- you know, I think there are certainly instances
12 where methane is showing up in people's water faucets and so
13 forth, but it is by far -- it's very far from settled whether
14 that's being caused by fracking, the extent to which fracking
15 is causing significant environmental problems at all, I mean, I
16 -- you know, I -- the jury is very much still out on that. I
17 just mention -- brought that up as an example of a relatively
18 recent practice and then -- that folks in different states and
19 even at the federal level are evaluating whether additional
20 requirements need to be implemented. That's all I meant to
21 say.

22 COMMISSIONER FOERSTER: Okay. I think the only place
23 where regulations being inadequate allowed fluid migration up
24 the annulus was in Pennsylvania which had kind of checked
25 itself out of the oil business until the.....

1 MS. TAYLOR: Until this.....

2 COMMISSIONER FOERSTER:shale developers.....

3 MS. TAYLOR: Yeah.

4 COMMISSIONER FOERSTER:showed up. And they've since
5 fixed their regulations.....

6 MS. TAYLOR: Yeah.

7 COMMISSIONER FOERSTER:and that's the only place I
8 know of where that was an issue and it's now been fixed. So I
9 just -- you know, I really hate the record not to reflect
10 accuracy.....

11 MS. TAYLOR: Right.

12 COMMISSIONER FOERSTER:in something that may be a
13 linchpin for energy independence for this country.

14 MS. TAYLOR: Right.

15 COMMISSIONER FOERSTER: And there's so much -- I'll try to
16 find a -- pick a four letter word to use, so much bad
17 information out there.....

18 MS. TAYLOR: Right.

19 COMMISSIONER FOERSTER:that is inflaming the
20 uninformed and I certainly don't want our transcript to
21 contribute to that.

22 MS. TAYLOR: Right. And I -- yeah, I definitely am not
23 putting forth here that fracking is causing major environmental
24 problems, I'm not -- that is not what I believe to be the case
25 and I know that states are responding and adjusting their

1 regulations to make sure if there are any gaps that they're
2 being met. I'm just -- all I meant to say was that that was
3 just an example of a relatively new practice that is still
4 being evaluated by different regulatory agencies, that's it.

5 COMMISSIONER FOERSTER: Okay. I'm sorry, I'm not trying
6 to pick on you.

7 MS. TAYLOR: No, that's all right.

8 COMMISSIONER FOERSTER: I'm done.

9 CHAIR SEAMOUNT: Commissioner Norman.

10 COMMISSIONER NORMAN: Just one last question along the
11 same line put to Mr. Danenberger. Do you plan to be available
12 this afternoon or.....

13 MS. TAYLOR: Yes, sir.

14 COMMISSIONER NORMAN: Good. So that.....

15 MS. TAYLOR: Yes.

16 COMMISSIONER NORMAN:if we did have a follow-up
17 question then we could ask it. Thank you.

18 MS. TAYLOR: Yes, I'll be here all day. Sure. Thank you.

19 CHAIR SEAMOUNT: Okay. Thank you, Ms. Taylor. It was a
20 very interesting and helpful presentation.

21 And now at this time we'll take a recess until 1:15. It's
22 -- you know, when my daughter -- when one of my daughters in
23 high school I said well, what time do you take recess, she
24 goes, dad, we don't take recess anymore. Well, after you get
25 older you start taking recesses again, they're really

1 enjoyable.

2 So the time is 11:59 and we're off the record.

3 (Off record - 11:59 a.m.)

4 (On record - 1:20 p.m.)

5 CHAIR SEAMOUNT: The time is 1:20 and we're going to
6 continue on with our presentations. Let's see, do either of
7 the Commissioners have anything -- any prestatements to make?

8 COMMISSIONER FOERSTER: Nope.

9 COMMISSIONER NORMAN: The only thing that I think might be
10 helpful for the Commission to indicate to the public is the
11 extent to which a transcript and all comments will be posted on
12 the internet. My understanding is that it is our intention to
13 do that so that folks will have access to it, but we don't need
14 to decide that now, but I think at some point.....

15 CHAIR SEAMOUNT: Right.

16 COMMISSIONER NORMAN:it would be very helpful to the
17 public.

18 CHAIR SEAMOUNT: Right. And I guess it won't be word for
19 word because the transcriber is leaving out the hmms and the
20 ahs. That's what she told me.

21 Okay. Our first presenter is Mr. Michael Munger. And it
22 says here on the agenda RCAC.....

23 MR. MUNGER: That's me.

24 CHAIR SEAMOUNT:is that correct?

25 MR. MUNGER: Yes, sir.

1 CHAIR SEAMOUNT: I always though it was C-I-R-A-C.

2 MR. MUNGER: Well, I'll explain it all, Commissioner.

3 CHAIR SEAMOUNT: Okay. Well, please identify yourself and
4 tell us the.....

5 MR. MUNGER: Identify yourself, yes, I will.

6 CHAIR SEAMOUNT: Let's be redundant.

7 MR. MUNGER: Thank you for the opportunity to speak to the
8 topic today. I'm Michael Munger, I'm the Executive Director of
9 the Cook Inlet Regional Citizens Advisory Council. And our
10 Board -- I just want to give a little brief background on who I
11 represent today. Our Board's comprised of 13 members,
12 municipality members represent the communities of Anchorage,
13 Kenai, Homer, Soldovia and Kodiak, also the Kodiak Island and
14 Kenai Peninsula Boroughs. Stakeholder members include the
15 Alaska State Chamber of Commerce that represent tourism,
16 commercial fishing, aquaculture, native, recreation and
17 environmental organizations. Our mission is to represent the
18 citizens of Cook Inlet and promoting environmentally safe
19 marine transportation and oil facility operations in Cook
20 Inlet. Oil spill prevention and response are key focuses of
21 the Council.

22 Again I appreciate the opportunity today to sit in front
23 of you, Commissioners, it's always good to see you.

24 Because the state laws and regulations passed after the
25 Exxon Valdez spill and through my experience, personal

1 experience, of -- I've heard the Interstate Oil & Gas Compact
2 Commission brought up a number of times today, I serve on it as
3 the Vice Chair of the Environmental & Safety Committee on the
4 IOGCC. I've had the opportunity to look at spill regulations
5 nationwide. It's my opinion that Alaska is one of the best
6 prepared states in the nation and I believe that they have some
7 of the toughest oil spill response regulations in the nation,
8 Alaska does, yet we recognize there's still room for
9 improvement. We also have very capable response action
10 contractors and a very impressive array of response equipment
11 and highly trained responders. However everyone needs to
12 realize that no matter how much response equipment and how many
13 responders we have, there will never be an adequate response to
14 a catastrophic spill like we just witnessed in the Gulf.
15 Obviously the harsh environment in Alaska and basic physics of
16 oil and water means that it's not possible to put the jeannie
17 back in the bottle. We have to be prepared to do the best job
18 humanly possible and we have to require a robust oil spill
19 response system and we must place our primary focus on
20 preventing a major spill from occurring in the first place
21 which leads me to my primary recommendations.

22 We've been talking about this for quite some time and I've
23 met with Commissioner Seamount on this and I've certainly spoke
24 to Commissioner Foerster about it and also the DEC Commissioner
25 about this and that we recommend -- the Council recommends the

1 transfer of the oversight and approval responsibility for well
2 control and blowout planning from the DEC to the AOGCC. The
3 AOGCC is responsible for the approval of normal drilling
4 operations, it only makes sense they'd be responsible for the
5 review and approval of emergency response plans for blowouts.
6 The AOGCC has drilling engineers on staff, DEC does not and so
7 the proper expertise for reviewing well control plans is in the
8 Commission. Given the recent blowout event in the Gulf of
9 Mexico we probably need to review our standards for emergency
10 well control plans, but this process should not begin until the
11 responsibility is transferred between agencies.

12 We believe there's a gap in the continuity between ADEC
13 contingency plan regs and the AOGCC requirements. And
14 basically it's the Council's desire to have comprehensive crude
15 oil development regulations that are affective and practicable,
16 boy, that's a tough one to say, regulations that fall in a
17 logical and sensible progression from one regulatory agency to
18 the next and regulations that close gaps and risk assessment
19 and risk management.

20 And finally -- and my comments are extremely brief today
21 and again I appreciate the opportunity, but we also strongly
22 support the increased funding to the AOGCC. We feel that
23 adequate funding must be a priority for this current
24 Administration in order for the Commission to conduct all its
25 current responsibilities and to additional recommendations that

1 you'll receive today. I think that would certainly help to
2 expand your field presence. I -- being a former state
3 regulator I always knew that -- when the -- you had increased
4 presence in the field it always seemed to make the industry pay
5 a little more attention. So I certainly support increased
6 funding for your agency or your Commission to do that.

7 So again very brief comments and I appreciate the
8 opportunity.

9 CHAIR SEAMOUNT: Thank you for taking the time to present
10 today, Mr. Munger. Commissioner Foerster, do you have any
11 questions?

12 COMMISSIONER FOERSTER: I don't.

13 CHAIR SEAMOUNT: Commissioner Norman?

14 COMMISSIONER NORMAN: I do. And I add my thanks to you,
15 Mr. Munger, and I recognize the good work you've done through
16 the IOGCC and elsewhere and the good interaction you've had
17 with this Commission.

18 I'm going to ask you if you agree with a position taken by
19 the Commission informally. We were invited to meet with
20 Chancellor Fran Ulmer and William Riley, Co-Chairmen of the
21 President's National Commission last year sometime and offer
22 our views. And among other things one point that we asked them
23 to focus on and consider is the importance of containment, well
24 integrity, if you will, adequate safeguards, blowout prevention
25 equipment and so forth, our point being that it is much easier

1 to deal with, and I'd use an analogy, preventing a fire rather
2 than having the fire department respond to it, guarding a
3 dangerous prisoner rather than having that prisoner break loose
4 and then figuring out how you mobilize the resources to capture
5 that person. And I'm wondering if you would agree with the
6 high amount of emphasis that we conveyed to the Commission
7 about the primary importance of making sure that we have good
8 well control. There's nothing in life we can guarantee, but we
9 strongly urge that focus not be lost upon the emphasis on good
10 well control and good regulatory oversight in that area as
11 opposed to figuring out how downstream we're going to deal with
12 a situation once there has been a release into the environment.
13 Would you agree with the emphasis we put on that or do you have
14 a different take on it?

15 MR. MUNGER: No, absolutely. And that's not to draw away
16 from -- I think one needs to focus on all areas, prevention and
17 response, but I've always been of the opinion and I believe the
18 Council would agree with me on this particular aspect, the fact
19 that -- and this comes from just an oilfield analogy, it's
20 always better to keep the oil in the pipe. And if you're
21 dealing with that aftermath you've kind of lost the battle
22 somewhat. And so practically speaking if you can control the
23 well you don't have to focus on response issues near as much.
24 So absolutely, I do agree with that.

25 And I'd also like to point out that these -- I was just

1 reading through some of the papers, and very interesting some
2 of the presentations and papers given today, but why the
3 docket's focusing on offshore and ultra reach wells, frankly my
4 recommendations or the Council's recommendations, should be
5 applied to onshore and offshore, just general scheme of things.
6 And it's very encouraging to see the interagency -- the
7 cooperation and working together preliminary I've seen on this
8 particular issue.

9 But back to your inquiry, Commissioner, is absolutely, I
10 think prevention is the real key here.

11 COMMISSIONER NORMAN: Thank you.

12 CHAIR SEAMOUNT: Okay. Mr. Munger, this transfer of
13 authority from DEC, do you envision that being a statutory
14 change or would an MOU be sufficient?

15 MR. MUNGER: Whatever would -- I'm certainly not an expert
16 on interagency agreements, but to me the most expedient and
17 easy as possible between agencies, whatever that may be,
18 Commissioner, I have no idea.

19 CHAIR SEAMOUNT: Okay. And.....

20 MR. MUNGER: You know, I would assume the MOU would be or
21 the MOA would be the easier route.

22 CHAIR SEAMOUNT:would the cleanup responsibilities
23 be transferred to the AOGCC?

24 MR. MUNGER: No.

25 CHAIR SEAMOUNT: Good. Good answer. Okay. Unless

1 there's any further comments or questions.....

2 COMMISSIONER FOERSTER: I just wanted to thank you for
3 coming, we also appreciate when you come in to visit with us.

4 MR. MUNGER: Thank you again.

5 CHAIR SEAMOUNT: Thank you. Thank you for driving up
6 here.

7 We're 15 minutes ahead of schedule, is it appropriate to
8 just continue on or should we wait in case somebody
9 specifically wants to come at the time that Dr. Myers is
10 speaking?

11 COMMISSIONER NORMAN: Well, I think we can -- agendas slip
12 and I think people understand that, but I'm wondering have we
13 established -- I would just like to be able to tell the people
14 here they don't need to take a lot of notes because this will
15 all be available on the internet, they certainly can take notes
16 or is there any doubt on that?

17 CHAIR SEAMOUNT: It's been recorded. So, I mean, that'll
18 catch all the hmmmms and ahs, is that correct?

19 COMMISSIONER NORMAN: And will it be on the internet?

20 MS. COLOMBIE: The public record?

21 COMMISSIONER FOERSTER: The transcript.

22 MS. COLOMBIE: Yes.

23 COMMISSIONER NORMAN: The public record as well as all of
24 the written comments that we have received.....

25 MS. COLOMBIE: Yes. Yes.

1 COMMISSIONER NORMAN: those will be scanned and
2 posted on the internet as well as the transcript of this
3 proceeding? Okay. Good.

4 CHAIR SEAMOUNT: Okay. Our next presenter is Dr. Mark
5 Myers from the University of Alaska, Fairbanks. Welcome, Dr.
6 Myers.

7 DR. MYERS: Thanks, Commissioner Seamount.

8 CHAIR SEAMOUNT: Nice tie.

9 DR. MYERS: Thank you. Well, first of all I'm here really
10 not representing the University, but just serving sort of as
11 expert witness on some of the issues. And when approached
12 about talking I really thought it was appropriate to talk about
13 an issue that's not directly related to blowout preventors, but
14 is important in terms of the overall safety issue and the
15 downhole safety issue, and that is developing and maintaining
16 the institutional capacity for oversight.

17 COMMISSIONER FOERSTER: And I didn't hear.

18 DR. MYERS: Excuse me, Cathy. It's developing and
19 maintaining institutional capacity for oversight. So if you
20 look historically, you know, at the Gulf spill and other large
21 natural disasters there's inevitably a human component to them.
22 And that human component then has to be responded to very
23 quickly by regulatory agencies that are often quite not
24 prepared operationally to handle the issue, nor is there
25 necessary clear levels of responsibilities.

1 So as was talked about before, prevention is clearly a key
2 and important piece of that. Prevention is in large part
3 responsible for -- the responsibility of the operator. On the
4 other hand the agencies are expected in granting permits,
5 giving rights, they're expected to manage and understand and
6 enforce the regulatory structure under which these permittees
7 are operating. Therefore there is ownership in there, in the
8 process both by the companies and also by the agency folks.

9 And one of the challenges and -- first of all I'll give a
10 little bit of my background. I spent a fair amount of time on
11 rigs offshore, some of the furthest offshore wells like Navrem
12 Basin (ph), Norton Sound, (indiscernible), onshore
13 developmental wells as well as exploration wells. From the
14 side -- point of being an exploration development geologist I
15 also served as a petroleum geologist with the State of Alaska,
16 later for about five years Director of Oil & Gas for the State
17 of Alaska, worked with the Commission. I think I worked for at
18 least five, maybe six different governors in that time frame
19 with the -- with the state. And then also worked in terms of
20 responsibility as Director of the United States Geological
21 Survey in which case we did a lot of research on energy areas,
22 energy assessment, a lot of work in Alaska as you're familiar
23 with. So I've seen the issues from lots of different sizes.

24 One of the challenges I faced when I was Director of Oil &
25 Gas was building and maintaining capacity of people. Again if

1 you think about we work in an industry that's highly
2 specialized, work with industry, regulate industry that's very,
3 very highly specialized, is very well compensated for that and
4 is always undergoing a certain level of technological
5 innovation that requires constant training and experience. The
6 consequences of those regulations in an energy industry are
7 extremely important to the state of Alaska and to the federal
8 government. Energy runs our economy, energy creates our well-
9 being of life and therefore is of extreme economic importance.
10 On the other hand it has the potential as we've seen for
11 extremely large disasters. So you love it and you hate it
12 quite honestly. And because it's so important and because it's
13 so lucrative economically, of course, it attracts very high
14 salaries and a lot of innovation and a lot of capacity.
15 Typical government regulatory jobs don't typically have that
16 same attraction for many of these key skill sets. And
17 particularly when you get from the federal level down to the
18 state level in a more -- a smaller environment it is often very
19 hard to recruit and retain the technical expertise that you
20 need in the agency to effectively regulate.

21 So in Alaska one of the things we worked hard on was to
22 try to raise the salaries of key employees that might be
23 somewhat competitive with energy. And it's been a challenge.
24 And we've occasionally been successful, but we've done it in a
25 way that's been fairly makeshift. For example, we use

1 basically a process of statutory exemption from the normal
2 hiring for geologist -- petroleum geologist and geophysicists
3 for both the Commission and DNR other than the State Geological
4 Survey which means the Division of Oil & Gas. That allowed us
5 to pay a higher salary, but still tied to a state salary
6 structure. And quite honestly when I became director of Oil &
7 Gas I worked with the Commission, we went to the Legislature
8 with the Administration's approval and were able to get
9 significant raises for our geologists and geophysicists, almost
10 doubling their salary which still put them about 30 percent
11 under industry pay. And that helped immensely, we were able to
12 recruit some, but we had a heck of a time still recruiting new
13 engineers out of the industry or mid-career engineers that we
14 were really targeting. The same thing with key inspectors. So
15 the salary structure has always been an issue.

16 One of the consequences of that decision was that the
17 employees were modeled the same way Division Directors or
18 Commissioners were, in fact, they were having to be approved by
19 the Governor's Office. And they were serving at the pleasure
20 of the Governor. And in doing that -- we've been quite
21 successful in terms of getting higher pay, but we put our
22 employees at risk, they were at risk serving employees and they
23 still are today. So as you look at the key challenge there is
24 if you want your regulatory environment to be separated from
25 your political environment there is risk there. And I'm not

1 talking about a specific Governor or a specific party, again
2 the same risks occur under Independent or Republican or
3 Democratic Governor. The fact is we do not insulate our key
4 technical political staff from political -- potential political
5 firing. And we also through the political screening process of
6 hiring have to go ask the Governor's Chief of Staff, no matter
7 who it is, for permission to hire an engineer or geologist or
8 petroleum land manager, et cetera. That again puts
9 vulnerability into the system and limits the pool of people
10 that could potentially be hired. There's also on occasions
11 been strong influence to place people that have politically
12 connected into these positions. And again these are not
13 probably the kind of policies we want if we want strong
14 transparency within our structure.

15 So the recommendation I would have for -- not only for the
16 Commission, but for the Administration, is to do something like
17 the federal government has done in creating a Senior Executive
18 Service and a Senior Technical Ranks where you have exempt
19 employees that are serving specific niches with respect to
20 energy and oil and gas where it's high value, where they are
21 appointed and managed by the organization itself and they are
22 not at will employees with respect to the Governor's Office.
23 And again I'm not saying that anything nefarious occurs, but
24 you can see the challenge there and the desire to separate out
25 particularly in regulatory of very sensitive industries in high

1 pressure environments with specific job skills.

2 And then in that process I would also advocate that the
3 Commission -- the model the Commissioners have used has been
4 effective, six year terms that are out of the cycle of the
5 political process, a vetting process with the -- again with the
6 Legislature which again is a balancing act and a vote of
7 confidence. It's the same way high level political appointees
8 are done by the federal government, nominated by the President,
9 but confirmed by the Senate. And I think with respect to that
10 role I would recommend that that model the Commission uses
11 extend into certain key positions because as was talked about
12 before there's a linkage between DEC and Oil & Gas in terms of
13 regulatory continuity and the Joint Pipeline Office I would
14 argue. So my recommendation would be that similar process
15 would be used for key directors. Commissioners are going to
16 serve at the pleasure of the Governor, but certain Directors
17 like the Director of Oil & Gas, the Director of the Joint
18 Pipeline Office, be appointed for a solid term again and then
19 confirmed by the Legislature. Again -- just again to assure
20 that the regulatory portions of these responsibilities are met
21 and there is no potential view from the public that these jobs
22 might be politically compromised.

23 Recommendation on salaries. That within the state
24 government the historical mechanism for salary adjustment has
25 been internal comparison of other state agencies, not market

1 value compared to an external market. So when the department
2 personnel request a classification and change in salary it's
3 done based on another department. So state government compares
4 itself to state government. The folks you're really trying to
5 recruit into these positions are typically folks that are --
6 have industry experience and background or equivalent. And
7 there's that challenge as you see here with MMS and concerns in
8 this restructure of BOEMRE was that the inspectors worked for
9 the industry, a revolving door back and forth. If you want to
10 keep continuity of workforce then you need to pay a comparable
11 wage. So I would recommend there be a process by which an
12 industry wage, you know, prevailing wage in Alaska for certain
13 skill sets that certified these same folks I recommend the
14 Senior Technical Staff for and that every three years that
15 salary would be adjusted or so to reflect like a three year
16 following average of those salaries. That way then there's no
17 incentive to move back and forth unless it's truly for a
18 lifestyle change, there's no economic penalty for staying long
19 term with a state agency to create that regulatory continuity
20 we want.

21 The other piece of this I would say is challenging is in
22 all cases state agency budget processes are torturous. Any
23 anymore with the volatility that we face long term continuity
24 of budgets for key regulatory agencies are really crucial and
25 your core capacity is maintained and that adequate inspectors

1 are available in the structure. To that end I would think
2 stability in the budgeting process needs to be greater. And
3 again because of the -- I say with the Commission in particular
4 they report to the Department of Administration, I would
5 recommend that there be more of a disconnect between the
6 Administration budget and the Commission's budget. Again it's
7 funded largely out of industry funds, but that there be a
8 mechanism to establish what the budget should be and then that
9 recommended to the Governor (indiscernible) versus going to a
10 standard agency process. Again you want to make sure you have
11 continuity of funding and capacity in the regulatory agency.
12 And if you look at some of the challenges that MMS faced, those
13 were huge challenges, they could simply not get enough funding,
14 they simply did not have competitive wages with industry folks.
15 And, of course, then you see the revolving door sorts of
16 issues.

17 You're asking a lot, the public expects and asks a lot out
18 of the regulators, they're working in a very important industry
19 that has again huge financial significance to the state and
20 it's a worthy investment, I think, to provide that strong
21 regulatory environment for multiple reasons. One is, in fact,
22 the industry will (indiscernible) more rationale ultimately
23 regulatory structure because you have technical experts that
24 are comparable to industry experts so there isn't a
25 misunderstanding of information or clarity of the information

1 they're receiving. Secondly you're able to train and maintain
2 your staff in an industry that's constantly technically
3 changing. And then finally perception of -- and public value
4 in these agencies will increase if they know they're properly
5 funded and maintained. And they're insulated from pressures
6 either from industry or political forces whether they be on the
7 right or the left.

8 So those are some of my observations in terms of technical
9 support.

10 I will say one of the other challenges is that as we move
11 forward the offshore technology will have to be dramatically
12 enhanced for subsea completions, for example, in the MMS,
13 things that will drive development in more hostile
14 environments, in the Arctic hostile with respect to sea ice,
15 bottom scour, remote access, lack of access, difficulty in
16 surveillance techniques because you're in the middle of winter
17 in very tight environments, very different challenges than the
18 Gulf of Mexico, but very sufficient challenges. There are
19 technological changes that are occurring with respect to sensor
20 systems, remote sensing, in terms of capacity to get downhole
21 data, with geophysicists that will allow a much better view of
22 downhill risk. Those are technologies that need -- the
23 government needs to understand and employ as they're developed
24 with the industry. So there's a huge need for technological
25 refreshment in the regulatory agencies. That's often very

1 difficult to obtain unless there's a sufficient budget for
2 training and unless there's opportunity to recruit key experts
3 in these fields. And I would say one of the big ones here is
4 the Commission has some seismic capacity, but they don't -- you
5 don't have a robust 3D and 4D technological capacity. And as
6 you look at the hazards, the shallow hazards and even a
7 understanding of the deeper zones in areas where we'll see
8 drilling expand, there could be much better use, I think, of
9 that technology, but again that costs money, it's an
10 investment. It's not that you don't use seismic data for
11 hazards (indiscernible), but that technology's rapidly evolving
12 with certain types of attribute analysis that's -- be highly
13 useful to employ in terms of risk assessment.

14 And then if I could I'd like to talk just a couple of
15 minutes about risk assessment. Fundamentally oil and gas
16 activity inherently has risk, but all activity has risk. I
17 made a decision to fly down here on a jet from Fairbanks this
18 morning. That decision was based on a risk assessment that it
19 was safe enough to fly. The -- hopefully it was an intelligent
20 decision, so far I would say it was, going back we'll see, but
21 the bottom line is in that decision a lot of factors were in my
22 mind. The first factor was was the airline company competent.
23 Second was if they're competent was the weather good enough.
24 The third factor was the regulatory structure good enough,
25 would air traffic control actually work, you know, would I be

1 able -- do they operate safely at the airport. All those
2 things I kind of take for granted, but they're in the back of
3 my mind every time you make a decision. So it's a risk based
4 decision and for me the risk was clearly worth it particularly
5 because I didn't have to wear a tie today.

6 But ultimately oil and gas development is a risk based
7 assessment, we cannot guarantee even with the best of
8 technology there won't be human error occurring sometime in the
9 system. The assessment of that likelihood of the risk drives
10 the way we manage that risk, it drives the way we do
11 prevention, it decides how much redundancy we need in the well,
12 it decides on the appropriateness of the drilling season, it's
13 derived by good information on the geology. Fundamentally
14 starts out with how much can that formation flow, is there a
15 risk, is it -- what's the chance it's over-pressured. It goes
16 back to the basic technology used in drilling, is it
17 appropriate technology. And the redundancy of the safety
18 system, how much redundancy because redundancy costs money.
19 Those sorts of assessments are often not done consistently
20 internally in companies and viewpoints vary (indiscernible)
21 necessarily within regulatory agencies. And there's an
22 interrelationship of those decisions with the next level
23 decisions, what do I need for a spill contingency plan is
24 primarily based on what that well can produce in the case and
25 what the likelihood of a spill is. The time you have to drill

1 in remote locations is based often on your ability to drill a
2 relief well or use well capping, but is that decision made
3 consistently.

4 So as was mentioned by the previous speaker there is not
5 -- there are gaps in the systems between DEC and their spill
6 contingency planning and their allowance of drilling schedule
7 and the real geologic risk. And we had long discussions in
8 previous Administrations about how to do that, you know, and
9 should the time frame be the same for looking at low
10 permeability Jurassic rock as it should be for high
11 permeability, high pressure cretaceous rock. One on the east
12 and one on the west, you know, very different geology, yet the
13 relief time needed -- the time to drill a relief well was the
14 same. Did that make any sense. One case where we did not
15 believe the well could flow, refrack, in any of the target
16 zones and we had good geologic data, the other well -- the
17 other case (indiscernible) 10,000 psi rock in a high pressure
18 reservoir which we undoubtedly strongly believed would create a
19 huge blowout. So again that basic geological sense of risk,
20 did it link back to the C-plan planning, the time allowed on
21 the ice, the technology allowed, did it fit in with the DNR
22 plan of development, you know, as DNR, as Oil & Gas looks at it
23 and their requirements. Is there a linkage between the
24 facility management, the pipe line infrastructure. And again
25 so you start seeing the risk management with oil spills and oil

1 contingency is a linked system and it's a risk based linked
2 system, the more information, the more safety cases as was
3 talked about earlier or operational analyses, scenario analyses
4 are done the better off we are. The more often agencies work
5 together in this discussion, the more often the agencies can
6 bring technical working groups together internally, and those
7 just can't be industry groups, those have to have the technical
8 capacity in the agencies. So in that decision you structure
9 how those discussions go on, is it done through separate
10 stovepipes, you know, and DEC does its thing, DNR does its
11 thing, the Commission does its thing or do you bring working
12 groups together and how often. And then finally how do you
13 deal with joint areas of interest like a Liberty or North Star,
14 are there consistent ways that the standards are meshed between
15 the federal agencies and the state agencies. Again so that
16 structure and those groups working together to draw a true risk
17 profile will dramatically improve the continuity of the
18 process.

19 Information flow between agencies. Critical information
20 doesn't necessarily flow between the agencies because their
21 statutory authority doesn't allow them to share data
22 necessarily. DEC typically doesn't see the seismic data, for
23 example. DNR has a bigger seismic data library over a larger
24 area than does AOGCC. So I think a lot of thought should go
25 into if we're looking at gaps analysis and risk analysis, first

1 of all how does the information flow so that the risk analysis
2 is done as well as possible. Secondly then how does that data
3 then translate into sort of a (indiscernible) decision making
4 process with respect to risk and again from the bottom of the
5 hole. As Commissioner Norman said it's a lot easier to keep
6 the oil in the pipe, but you can't guarantee it even with the
7 best technology, the best redundancy, human error will occur
8 and there will be risk. So you have to answer the other piece.

9 Finally I think it's critically important that the
10 decision makers, the ultimate policymakers, have the benefit of
11 the wisdoms from the agencies when they make decisions. And we
12 can see that play out in the Macondo spill, the difficulty of
13 the agencies working together, the time it takes to develop
14 that structure early on and then how that information gets
15 communicated up so more rational decisions are made is crucial.
16 And so I think interagency working groups or structures are
17 really important. At one time it was looked at moving the
18 Commission within DNR and it was determined it was not and I
19 think -- not a good idea. I think post-Macondo spill I think
20 very few people would advocate for that, you know, sort of
21 approach. So again enough independence and autonomy of the
22 structure, but yet strong links and intercommunication I think
23 are probably for the Alaska case a really -- I think quite a
24 good solution.

25 So that's all I really have to talk about. Be happy to

1 answer any questions.

2 CHAIR SEAMOUNT: Thank you, Dr. Myers. Commissioner
3 Foerster, do you.....

4 COMMISSIONER FOERSTER: I do. Well, first, Dr. Myers, I'd
5 like to say that I'm glad you took the risk to come down here
6 today. And the second while I've got people laughing, based on
7 your comments about our budget scrutiny, were you sitting in
8 and eavesdropping on the budget review we had with the
9 Department of Administration over this agency's budget last
10 Friday?

11 DR. MYERS: Absolutely not. But I've been.....

12 COMMISSIONER FOERSTER: But you can imagine what it
13 was.....

14 DR. MYERS:been there, done that, I guess, is the
15 term.

16 COMMISSIONER FOERSTER: Yeah. So you feel my pain.

17 DR. MYERS: It's inevitably human behavior, it's
18 organizational structural behavior unless there are -- unless
19 there are better pathways.

20 COMMISSIONER FOERSTER: One of the questions I was asked
21 was why do we spend so much money paying people -- flying
22 people up to the Slope. And, Chuck, would you like to answer
23 -- they were questioning our inspectors' travel budget. Let's
24 just keep them home. Okay. Enough of that, I'm sorry. I
25 apologize.

1 CHAIR SEAMOUNT: That's a real boondoggle going to the
2 North Slope in December, isn't it?

3 COMMISSIONER FOERSTER: Yeah. Yeah, and when I offered
4 the question, and asked her the opportunity to go up and
5 shadow, he was too busy. Okay. You are preaching to the saved
6 so do you have any suggestions on how we move your
7 recommendations forward given that most of them are outside of
8 our jurisdiction?

9 DR. MYERS: Well, I think, you know, if you have within
10 the state structure there's multiple -- multiple audiences to
11 do this, you know. You have different balancing parts of
12 government for that very reason. So you first of -- but the
13 first thing is the Administration has to look at these issues,
14 right, they have to make the recommendations. The Legislature
15 can do it, but it's much more powerful. You have a Governor
16 whose goal is to grow oil and gas operations, fill the pipe
17 line and it's a state priority, has been for all of six
18 governors, I mean, doesn't -- doesn't change, but has put an
19 emphasis on this, that's one of the -- one of the avenues is to
20 open that discussion up through whatever channels you have and
21 experience to say this is the goal, this needs to be a
22 component of an issue, of goals because failure to have an
23 effective regulatory environment will lead inevitably to
24 lawsuits and dysfunction. And we've seen that again and again
25 played out there. You simply -- it also will lead to erosion

1 of public support not only in Alaska, but externally.

2 We have to work -- the other thing is many jurisdictional
3 questions are not the exclusive property of the state even on
4 state lands, you still have a Corps of Engineers, you still
5 have EPA, you have lots of other bodies that are concerned
6 about the risks of an oil spill and will have to do scenario
7 building on their EIS or other documents which then affects and
8 slows development. So the more credible the state agencies are
9 in terms of their regulatory functions, the more of the gaps
10 that are filled, the more successful future oil and gas
11 development in the state will be. So I think you start there,
12 Commissioner Foerster, that would be my recommendation is have
13 that intelligent discussion with the key policymakers within
14 the Administration and say this is important. This is not just
15 regulatory oversight, but this is the -- your ability and your
16 credibility to increase oil and gas production and that's the
17 Commission's way of doing their part.

18 And again the discussion I suggested doesn't lead just to
19 the Commission or the same exists in the other key agencies
20 that have regulatory authority and oversight. Filling those
21 gaps again, understanding those gaps are real. So investment
22 in the Commission, investment in oil -- in our oil and gas, the
23 regulatory side and in DEC is I would argue just a good
24 business decision to make. And you just have to make that
25 case. The challenges that you face with working through budget

1 offices is inevitably they have lots of pressures and
2 prioritization's a very difficult thing to do. So again the
3 prioritization from the senior leadership's important.

4 Understanding the technical whys is also important. I
5 mean, I spent a lot of time trying to explain these to --
6 explain my 9,000 person agency to a 26 year old O&B examiner.
7 It's one of the most complex issues that you can imagine. And
8 you can imagine the relative success and failure of that, but
9 the reality is you have to do it, you have to keep working,
10 explaining the so what behind it, never give up, be tenacious,
11 but respectful in my opinion. And so you have to -- the budget
12 folks simply need to understand, as you said let them shadow
13 you, invest in their education and have those discussions as
14 Commissioners, have those discussions at the senior level as
15 well. Doesn't hurt to have support from the public sector and
16 from the industry as well. Obviously it's -- we're all in this
17 together in reality, it's shared space, it's shared economic
18 interest and environmental interest.

19 COMMISSIONER FOERSTER: Well, one more question. You
20 weren't hear this morning, were you?

21 DR. MYERS: No, I'm.....

22 COMMISSIONER FOERSTER: Okay. So you missed some
23 statements about confusion and overlap between and among the
24 different state agencies. And one of the areas that was cited
25 as a potential overlap is what does DOG's regulatory authority

1 versus AOGCC's with the jack-up in the Inlet. And there's been
2 a lot of struggle with the operator as to who's telling us what
3 to do. Could you give us as a former DOG Director your
4 thoughts on where that delineation lies, what overlaps there
5 are and what you would recommend doing about those?

6 DR. MYERS: Well, there are significant overlaps based on
7 the creation of the various agencies and their responsibility.
8 And the DNR model is more the federal model -- the former
9 federal model of, you know, of a single management agency. The
10 Commission was created after that and my understanding it's
11 more on the laws of the state of Oklahoma. And so
12 terminology's somewhat different, PAs versus pool rules, but,
13 for example. And they're not exactly the same, but they have
14 many shared functions, physical and economic risk on the DNR
15 side, physical waste on your side, safety is paramount with
16 both, the downhole -- generally the downhole mechanics and
17 inspections are yours, DNR does the in field lines to the
18 extent they're done and then the external, you know, pipe lines
19 are done usually by the federal government, by (indiscernible)
20 or another federal agency, not the state or the Joint Pipeline
21 Office in some cases. So you have this -- again a
22 jurisdictional overlap. My opinion and seeing all the years of
23 it working that generally it works pretty well if the agencies
24 are talking and generally to clear it up would be a major
25 statutory rewrite with respect to it. It's just because

1 they're -- they're similar, but they're not the same. So if
2 you say okay, physical and economic waste will be the
3 responsibility of DNR, you still have pool, you still have
4 pressure, you still have safety issues tied again back to the
5 same general sorts of surveillance and analysis. So I don't
6 think there's an easy way to clean it up, it could be done, it
7 would be a lot of effort. I tend to think again a better
8 collaboration, strict collaboration is the best way to handle
9 that, discussions among the agencies even though they don't
10 happen as much as we'd like it to, but I think it does actually
11 work fairly well among the technical staff. In my experience
12 there's good sharing of information and data. I know there's a
13 lot of work to share well data. And quite honestly it depends
14 on the relationship of the Commissioners and the Director in
15 many cases. And when that's good information flows and when
16 there's not sometimes it doesn't. So interpersonal skills and
17 better communications, I think, will fix much of it.
18 Regulatory oversight, again if you wanted to do that you'd
19 probably want to do it through statutory change just the DEC, I
20 would not recommend such a major change of responsibility on an
21 MOU because the statutory authority still stays with the
22 agency. So they'll still be tagged even if they give you
23 authority therefore they will be reluctant to give you
24 authority. So I think ultimately if you do see significant
25 overlap areas and I think there probably needs to be a space of

1 integration between DNC, particularly when you look at spill
2 continuity. And there needs to be another one between -- when
3 you get another well bore and -- on the regulated pipe line
4 outside the carrier. That is still in my opinion fairly weak,
5 a weak interconnect of agency responsibilities. Again with
6 respect to physical and economic waste I would argue -- and
7 physical waste, there are real reasons both agencies have that
8 responsibilities and I wouldn't probably try to tackle that
9 one.

10 COMMISSIONER FOERSTER: Well, you know, you stated those
11 delineations and overlaps pretty succinctly and clearly. How
12 many years of wading through the system did it take you to get
13 good at that and how can we get operators to get there quicker?

14 DR. MYERS: I'm sorry, how can you get.....

15 COMMISSIONER FOERSTER: That's a little bit
16 rhetorical.....

17 DR. MYERS: Yeah.

18 COMMISSIONER FOERSTER:but, you know, it is a
19 complicated system and what can we do to help operators
20 understand who does what and where their accountabilities lie
21 because the last thing we want is an operator not knowing who
22 they answer to and what the question is?

23 DR. MYERS: I think one opportunity would be to do a
24 combined agency 101, sort of -- you know, there are -- there
25 are cases and I'll use the Joint Pipeline Office as an example,

1 where you have an agency, but you second people from that
2 agency, from other agencies, and there are probably within the
3 Joint Pipeline Office, there's -- of course it's state and
4 federal integration, but there's also representatives of Fish &
5 Wildlife Service, other groups within DNR, DEC, within that
6 group and they second one person or so. So if you wanted to
7 have a one stop sort of educational office point you could do
8 that in the state government, it may be a worthwhile effort to
9 assign one agency lead with respect to explaining where those
10 lines and boundaries are, but without adjudicating operations.
11 Another way would be to do a quarterly seminar where the
12 agencies get together and explain these are the authorities
13 because it is complicated. Ultimately a lot of that
14 complication comes because the state owns the land under which
15 much of the production occurs, it sets the standards for
16 unitization and you have multiple agencies protecting
17 correlative rights in the structure. So in fairness it is a
18 complex system, but it is a system that's well established and
19 I think generally can work well. So I wouldn't deconstruct the
20 system personally unless you wanted to create a giant
21 Department of Energy and you put it under the same roof and
22 that's been discussed at times, that takes a lot of energy, pun
23 intended, to do that and are the advantages of that. And one
24 thing then is you disconnect with DNR, Oil & Gas, from the
25 surface mining, land and water folks that have the surface

1 responsibility. So the land cadastral record system become
2 disconnected. So again as you pull things apart to put things
3 together there's always pieces that are going to be outside and
4 to get a permit on surface use you'll still have to go over to
5 Mining, Land & Water. So my suggestion is rather than attack
6 all the overall structure of government, structure something
7 like the JPO or at a minimum do a easy, open time where they
8 can come to a single point and talk to all the agencies and
9 they can be pointed in the right directions.

10 COMMISSIONER FOERSTER: I'm hearing, you know, having a
11 person whose job it is to be the traffic director for an
12 operator, saying well, this is your question, here's who you
13 need to go to, this is what your problem. Yeah, that's a great
14 idea. Okay.

15 DR. MYERS: Well, you can start with a web -- even a
16 website where you can get to it all.

17 COMMISSIONER FOERSTER: And one more question. Since I've
18 been here we've enjoyed a good relationship with the Director
19 of the DOG, but I'm a big believer in making organizations
20 people proof because that's not always the case. And, you
21 know, it's wonderful to say engender good relationships, but
22 once those breakdown you still have to have things work and
23 what are your thoughts on that?

24 DR. MYERS: The -- it's tough because when communications
25 cease even internally in organization you have similar -- you

1 have similar problems. And that is the argument for a
2 Department of Energy type approach where there's accountability
3 through the structure to -- you know, to a single senior
4 official that then can -- you know, can adjudicate. I think
5 again there's a structure here setup at the Commission where
6 the Commission is designed to be independent of that senior
7 adjudicator. You are the senior adjudicators because of the
8 quasi-judicial nature of the Commission and your -- it's the
9 way you're appointed for six years, the way you not be fired
10 for cause. I think there is an issue there again that I
11 brought up earlier that my recommendation would be senior
12 officials, maybe the spar (ph) Director in DEC and the DNR Oil
13 & Gas Director because they're such unique positions where
14 they're treated similarly. So again I think that would help
15 some. Again the DNR Oil & Gas Director reports to a
16 Commissioner and the Commissioners -- a Commissioner of
17 agencies are inherently going to be political officials. And
18 so you create again the potential for friction even when their
19 -- folks are working together because one agenda might be tied
20 more to -- I will say more to an initiative (indiscernible) the
21 overall safety architecture or of the statutory and regulatory
22 requirements. And it's very tough like you said when you have
23 to prioritize budgets to put safety first at all costs and you
24 can see again if you look at some of the failures in the system
25 whether on the corporate side or the government side, it's

1 historically -- it's an investment decision. It's not evil,
2 it's just that I've got two priorities and this risk is
3 relatively low and I'm going to take it because then I can do
4 this over here. Well, low risks probabilistically over time
5 lead to disasters. So again in a way and the behavior's fairly
6 rational, but there needs to be a protection and a security
7 because the catastrophic effects of these blowouts and major
8 spills are so large. The airline going down is so large. So
9 you really want to invest a whole lot of money in those rare
10 occasions to protect from that. So that balancing again I
11 would argue might argue for a somewhat different model. Now if
12 you look at what the Secretary of Interior did, that's a very
13 different approach, he just said we're going to put regulation
14 in one box, we're going to put leasing in another box and we're
15 going to put royalty accounting in another box. That's another
16 model, but that's a very expensive model because incredibly to
17 do royalty accounting good based on my experience with the
18 state you have to know a lot about the rocks and the allocation
19 and the value of the law, you have to know a lot of
20 engineering. You can't simply do it with accountants, there's
21 integration of effort. On the leasing side you can't make
22 good, intelligent leasing decisions without a good knowledge of
23 the subsurface and set your stipulation and mitigation measures
24 based on the knowledge of risk and of safety. So again you
25 need to develop parallel staffs if you're going to still fight

1 them. That's again a very expensive, challenging way to do it.
2 It is a way to do it and if it's appropriate, I mean, it
3 certainly can be tried, but again with the budget to fall -- to
4 directly increase BOEMRE to the size you would need to make
5 that model work effectively, will that budget be forthcoming I
6 guess is the challenge.

7 COMMISSIONER FOERSTER: I have one last question for you.
8 You talked about how difficult it is to jump all the hurdles to
9 get adequate compensation for technical people and this is a
10 record and you and I have commiserated these kinds of things
11 over a beer and a Kleenex before, but I'd like it on the record
12 for you to list what you think the biggest hurdles in this
13 state are for getting adequate compensation for technical
14 employees so that the people who can affect those hurdles might
15 read the record?

16 DR. MYERS: Well, you know, I think one of the challenges
17 is the state government folks that do employee relations, human
18 relations, have to work on the broad spectrum and they have to
19 work through a very unionized structure. Well, first of all
20 exceptions are very difficult to make in those sorts of
21 structural conditions where the consequences of raising some
22 salaries means there's an expectation of a very large salary
23 raise across the board and it's not necessarily skill based.
24 The decision to base comparables -- comparable pay only on
25 state agency equivalency is a circular argument, but that's the

1 argument that's been used. So there's no way to effectively
2 raise a petroleum engineer more than a civil engineer who works
3 on highways. And they're both engineers, fair enough, and they
4 both point to probably a similar educational -- level of
5 education. The bottom line though is one -- in the private
6 sector one job demands a lot more money and at least cyclically
7 does. It's just the nature of the private sector. On the
8 other hand if you want to attract the right people you have to
9 pay that higher salary over time or you can't recruit or
10 retain. So the system can't easily make exceptions.

11 So what we did with the exempt employees was to get the
12 argument with the approval of the Administration to the
13 Legislature through a process. And we had bits of it with the
14 engineer who had a statute that says specifically you can do
15 exempt geologists and engineers. What we didn't do was
16 separate that from the political hires, from the Commissioners.
17 And not the Oil & Gas Commissioners, but the Cabinet Member
18 Commissioners. So it should have been done or even Division
19 Directors because you truly do not want these higher technical
20 guys being political appointees tied to a single Governor or
21 you don't have continuity. So reality is there needed to be an
22 exemption, a ring fencing those positions. You also for those
23 same reasons do not want the final approval in non-technical
24 Chief of Staff, working for a Governor who is looking through a
25 very different lens than the agency will look through when they

1 hire people. You also want to be able to put out there the
2 best qualified candidates and be able to recruit those.

3 Now in the union job structure there's a requirement to
4 interview those best candidates, there's a procedure to make
5 sure it's fair and reasonable and the exempt process has no
6 obligation to do anything like that. So some hybrid system in
7 between those two where there's a recruitment, a technical
8 qualifications and series of reviews and then a hiring of that
9 technical employee, but not serving at will and not needing
10 that last level of approval. Again the system was never
11 designed to require the Governor's Chief of Staff to look at
12 every engineer you hire and say they need this or a petroleum
13 land manager in the case of DNR. But that's, in fact, what the
14 system was built on. And we built it on that, we band-aided
15 that in there so that change is really important, I think.

16 So the recommendation is that you really create an exempt
17 technical working class specific to areas. And again we were
18 pretty supportive of the union, never really argued that these
19 are unique, they're not a very large class so you're not really
20 fundamentally affecting large classes of employees. But with
21 that first piece then the second thing is what do you pay them.
22 And I would argue that the pay structure ought to reflect that
23 of the industry. Again we designed it when we worked through
24 it in about 2001 to look at the MMS as our comparison, they
25 were a comparative agency. If you at the MMS, their failure to

1 recruit and their brain drain is severe right now. So it's not
2 -- we didn't hit a high enough target, we hit an acceptable
3 target for both the Legislature and Congress, but we
4 fundamentally didn't hit the market. So in this next
5 generation as we are producing less engineers and geologists
6 and I believe in the market we're in now the hiring of those
7 guys is at salaries that probably exceed Commissioner
8 Seamount's salary out of school in reality. The fact is you've
9 got to figure a way to readjust the pay structure if you want
10 to recruit mid-career people out of actively, gainfully
11 employed companies.

12 So with that respect I would strongly recommend that you
13 use an analysis of industry pay in Alaska, targeted probably at
14 the mid-range and get the best published data or get a source
15 of data that's repeatable, that the Legislature can see, and
16 use a moving year average because it's volatile, and get a big
17 enough statistical sample size and use that as the basis for
18 your salary. And that way folks can be pretty confident if
19 they come to work either here or DNR that they'll be able to --
20 to be able to be competitive or reasonably competitive with
21 that of industry.

22 COMMISSIONER FOERSTER: Thanks.

23 CHAIR SEAMOUNT: Thank you, Commissioner Foerster.

24 Commissioner Norman.

25 COMMISSIONER NORMAN: Thank you, Mr. Chairman. Dr. Myers,

1 we really appreciate you coming in. I think you bring a unique
2 perspective by virtue of the various positions you've held,
3 critical positions here in the state of Alaska and then also a
4 national perspective, you rose to the top pentacle of the -- I
5 think that a geologist in government service could aspire to at
6 least. And I might throw out my recollection is that it was
7 relayed to me in talking to your scheduler that you were flying
8 in late last night from somewhere else, but you made a special
9 effort to come down. So again with that in mind why we express
10 our appreciation.

11 I have four or five questions I'd like to throw out to
12 you. Because of your broad experience and now you're in a
13 position where you're somewhat detached from a lot of it, I
14 wanted to talk about the relationship between regulators and
15 industry as you've viewed it in your many years here in the
16 state. And I raise that question because in the National
17 Commission report MMS either fairly or unfairly there was some
18 talk of undue familiarity in certain offices between industry.
19 We don't have the capability and it's not our job to pass
20 judgment on that, but I did -- that did catch my eye in the
21 National Report and I'd like to ask you candidly what is your
22 impression of the relationship between industry and regulators,
23 not just this agency, but generally regulators in the state of
24 Alaska?

25 DR. MYERS: Thank you, Commissioner Norman. The issue

1 with the MMS, I think, was somewhat sensationalized and over
2 reported from what I understand the actual situations were
3 because I was in the Department of Interior at the time the
4 allegations came out. And I also was told that the actual
5 conditions that were -- that happened had been fully reported
6 to the Justice Department prior to the announcement by the IG
7 and that the Justice Department had declined to prosecute any
8 of them. And, in fact, the minute -- several of those
9 employees had already resigned. So the issues that were
10 discussed in there were issues with a system that actually
11 worked and people had been -- had been reported and corrective
12 action had been taken to the extent the agency had been allowed
13 to take them by the Department of Justice. And then it was
14 reported by the IG and rather sensationalized in the press. So
15 in reality I think some of this stuff was -- not that there
16 weren't serious allegations, several of those allegations were
17 improper actions within -- between employees within the office.
18 Things like leaving the office and getting a sole source
19 contract. Again the violation had nothing to do with the
20 industry, but it was an internal -- it was clearly a wrong
21 thing to do. There were folks that went out to lunch with the
22 companies and believed they were staying underneath the limit,
23 but the companies report an expense account at higher levels,
24 you know for what they all -- so they order the chicken
25 sandwich, but a lot of people had steaks. And so the company

1 probably averaged the expense account and they were over the
2 limit. So some of these things that were reported I was told
3 were really not huge violations. On the other hand they were
4 major mistakes within the agency that had been reported,
5 failure to put key terms into leases, some accounting, some
6 rotating door issues. So they're -- I'm not trivializing the
7 issues, just that the big, sensationalized issue, many of those
8 probably were not, my understanding, as advertising in the
9 press. And my experience is often it's very difficult to
10 understand when you're looking at press reports what really
11 happened or didn't happen.

12 That said, overall my impression has been the contact with
13 the industry is generally very professional within the
14 agencies. There is immense pressure at times at the political
15 levels obviously because, and I'm not talking about one
16 Administration or the other, I'm talking about six
17 administrations over time, industry has huge pushes and huge
18 desires and there's a lot of frustrations again on slower
19 regulatory processes. Sometimes there are folks within the
20 regulatory agencies that do drag their feet and most times it's
21 a capacity issue or a complexity of the issue that the industry
22 doesn't understand, that the statutes were setup and the
23 regulations were developed in such a way that the
24 implementations of them are very difficult and subject to wide
25 variations of interpretations. And any of you that have worked

1 with petroleum landsmen know they will take the side most
2 advantageous to the industry and that regulator has to look at
3 that issue and say well, you know, is that the intent of the
4 law or not. So there's always a balancing act in that range of
5 reasonable discretion, it takes time, it takes confusion and
6 often if the result comes out the way the company -- a little
7 more stringent regulation the company had interpreted there are
8 arguments and disagreements. And those lead to a lot of verbal
9 heated discussions at the higher levels in government. And
10 that's sort of the nature of our system quite honestly. Again
11 as long as those discussions get referred back to technical
12 experts and don't get overridden within the structure, it all
13 works pretty well.

14 So my viewpoint is the Commission does stay very -- the
15 Commission as of today stays very un-passionately neutral by
16 design. And it has Commissioners and Staff with the highest
17 integrity. That's something to be very carefully safeguarded
18 and is a great model. Part of that again is your independence,
19 your six year terms and your independence, I think, preserves
20 that capacity to be there without fear of losing your job.
21 There's always the fear of reappointment, I guess, that exists.
22 There's always risks to your budget, but overall I -- my
23 perception is it generally works very well. And the fact that
24 you have strong hearing processes is important.

25 On the other hand it's important that the industry has an

1 opportunity to talk to the technical people because otherwise
2 you can't convey very sensitive, confidential information.
3 Sometimes that gets characterized as back door dealing, but
4 sometimes it just simply an understanding of the facts. And
5 there is a challenge there because you inherently have
6 confidential technical data that's being discussed that cannot
7 be released to the general public. So there's suspicion out
8 there, but those conversations need to occur in order to make
9 good, sound technical decisions. So the -- then the process of
10 releasing the results of those decisions and those permits
11 needs to be very transparent. But it's a challenge to the
12 public, the public gets irritated when they don't know the
13 basis for the decision. So inherently again the more that can
14 be explained to the public the better. But often the challenge
15 is you simply can't talk about some of the key data that leads
16 to that conclusion. So inherently there's a relationship that
17 look -- can look suspicious to the public often is not.

18 On the other hand the -- you know, the public process in
19 its nature can be very slow and painful for the industry. And
20 there's always a need to look at should it be streamlined.
21 These are really fair criticisms. Is there overlap and
22 duplication that's delay or is it fundamentally the company
23 didn't supply the sufficient data necessary to make the
24 decision, thinks they did, but they didn't and therefore the
25 agency says no, you got to give us more data, we need more

1 time, delays the process.

2 So both sides are true, sometimes agencies are over
3 capacity, they have difficulty in delivering decisions on time,
4 other hands very incomplete applications are sometimes accepted
5 when they shouldn't be and therefore they have to work through
6 the issue and it takes a lot longer than you would like. So,
7 you know, both things are true.

8 One of my other personal biases is our -- we're very, very
9 generous in extending confidentiality of data and sometimes
10 that a good thing for a company's interests, but sometimes long
11 past its commercial value data's held confidential. That data
12 often made public would help people better understand decisions
13 and would lead to, I think, ultimately a better relationship
14 from the public, industry and the regulators. But again
15 there's a lot of resistance and fear of thank, I think, in some
16 parts of the industry. And I think our particular seismic
17 data, that's actually a mistake. There ought to be a long -- a
18 relatively long commercial period of value, but then that data
19 ought to be released. I often then we hold wells confidential
20 too long, a two year period is -- should be generally the rule,
21 I think seismic confidentiality should be an exception, I think
22 that should be fairly narrowly confined, but often is requested
23 on a very broad basis. The lack of that data again erodes --
24 sometimes erodes public support or impedes decision making.

25 COMMISSIONER NORMAN: A few years back I had a chance to

1 talk to the then Chair of the IOGCC, it was the Governor of
2 Wyoming, Dave Freudenthal, and his State Director was there,
3 but I in making conversation just asked him about what level of
4 compliance do you want, he turned to his Director and he
5 brought him into the conversation and he said I said that I
6 want the ability to take any member of the press wherever they
7 want at a point of their designation and when we get there I
8 want to be able to tell them they will find substantial
9 compliance with the laws of the state of Wyoming. And I
10 thought that was a very simple statement, but is that a
11 realistic expectation?

12 DR. MYERS: No, my opinion it's not. It's a great
13 philosophical argument to have. It's one of the, I think,
14 challenges that comes to the heart of the spill issues.

15 Our system is based on rational operators and voluntarily
16 compliance otherwise you need a whole lot more inspectors, you
17 need a whole lot more enforcement actions, et cetera. If that
18 system fails then structurally you really have to do something
19 differently. And even -- I'll give my airline example, can you
20 imagine having to have an FAA inspector look at every airplane
21 before every flight. If folks did not trust the airline
22 industry well enough, if there wasn't enough of a safety
23 record, the industry would come to still, we wouldn't
24 practically be flying. So there's an inherent amount of
25 voluntary compliance where spot checking's necessary,

1 compliance simply cannot be guaranteed, it's a risk based
2 assessment. So you build the cultural capacity, you build
3 rational decision making, you build clear regulations so they
4 can comply. And then you have to have a mechanism if you have
5 an imprudent operator or an operator -- and imprudent, I mean,
6 not deliberately sabotaging it, but takes a series of actions
7 that combined lead to the disaster that's clearly human
8 induced. When you consistently strip out the safeguards and
9 you're down to a single point, when you really have to use the
10 BOP you've really failed when you think about it, for example.
11 BOP's the last ditch device, you should never get there.
12 There's no reason in this time and day that you need it. You
13 know, but stuff happens and if you're in that situation then
14 you really have to analyze and say we have to do a lot better
15 than this, we have to have our -- you know, our first lines of
16 defense really working well for safety.

17 And doing that safety case, knowing the what ifs,
18 understanding the consequences of actions by people that might
19 appear isolated that in combination lead to significant risk
20 and inevitable failure of systems. It's sort of like a pilot
21 flying from VFR conditions into IFR and ultimately crashing in
22 a mountain pass. It usually doesn't happen that they run into
23 a mountain, usually their visibility decreases and decreases
24 and they make a series of decisions to continue, continue to
25 the point their in a box canyon and then the visibility totally

1 goes and they're too far in to turn around and inevitably leads
2 to the collision. That wasn't a single decision, that was a
3 series of decisions made from the minute that pilot got in his
4 airplane, analyzed the weather and made that decision. There
5 are many times that pilot could choose to turn around and that
6 pilot didn't happen to turn around. There are alternative
7 choices he could have made and he didn't and end as the
8 accident. So simple phrase, VFR and IFR condition means a
9 series of escalating errors with less chances of recovery.
10 Well, I see the same thing in most safety cases. I would argue
11 that realistically culturally we have to be build the culture
12 that we recognize ahead of time what the consequences of those
13 decisions are and maybe I don't need to get home tomorrow
14 night, maybe I'll spend another day here. That culture
15 sometimes breaks. If that culture is allowed to continue to
16 break and the consequences are someone else dies, but not the
17 guy who made the decision, then we have a broken system. So I
18 would argue that it really is based on making sure that the
19 culture is such or the consequences are such that drive the
20 culture in such a way that we don't get to this point where we
21 have to inspect every piece of equipment, it's simply not
22 feasible in developmental stage. Maybe in exploration wells
23 you can put inspectors out there, but in development stage
24 you'll never have enough inspectors to look at everything.

25 So I would argue that his goal is probably not realistic,

1 it's optimistic. But at the same time there's lot of things we
2 can develop in terms of a safety culture, both in industry and
3 within the government. And again that starts with competent
4 regulators. If the industry's going to totally self police and
5 it's going to work fine we don't need the regulation, that's
6 not been true -- that's not been proven by history over time, I
7 mean. So the consequences of that again are rational,
8 reasonable inspections and corrections of actions. That takes
9 an educated, intelligent regulatory structure. So I'll come
10 back -- and we'll find -- they will find infractions inherently
11 in the system, but if you can find that before they get to that
12 single point of failure you're okay.

13 COMMISSIONER NORMAN: I jotted down something that Mr.
14 Danenberger said earlier today, it was a sentence and he -- I
15 believe I got -- I captured it right, I'd invite him to correct
16 me if I missay it. But he said that in his opinion over many
17 years that he'd come to the belief that good regulators are as
18 important as good regulations to making sure things work
19 properly. Would you agree or disagree with that?

20 DR. MYERS: They're both equally important, I would agree.
21 Good regulators with bad regulations have no ability to
22 regulate. And good regulators will not step outside what the
23 regulations tell them, a reasonable interpretation of what they
24 tell them. So they both have to go together, it's absolutely
25 clear. And I think the good regulator part in a very complex

1 technical industry with large risks, large investment, huge
2 consequences for delay, all these things requires an
3 extraordinary amount of good regulators, extraordinary capacity
4 among your regulators, adequate capacity, adequate budgets,
5 adequate training. And they also have to be constantly aware
6 of new and better ways to do things. The industry will adapt
7 very much more, very different technology when we see the first
8 production on the Chukchi Sea, has to be. Well, will the
9 regulators be able to understand that, will we understand and
10 use the best technology on pipe lines across state lands. Will
11 we adopt micro-technology, micro-sensors into smart well
12 design. I mean, there's no reason, we're adapting in all such
13 other places, are we going to adapt in this industry,
14 absolutely. The industry will do it because it makes sense to
15 do it. Will our regulatory community be able understand and
16 use it and associate our ability and apply that ability to
17 regulate and minimize risk. I don't know the answer to that
18 question. It's hard working at University and seeing this
19 technology develop, seeing the miniaturization, seeing the
20 information flow that will come out there. One of the biggest
21 challenges is to intelligently interpret the data that you have
22 coming out. So that takes a Commission of the future that's
23 going to have a significant IT capacity to fuse data. And it's
24 going to take ability to interpret near real time data. As a
25 regulator you're going to be demand -- make that decision now,

1 right, that we got -- you know, we got a million dollar -- we
2 got a \$5 million a day at that time well going on and why can't
3 you give me the answer now, I'll give you all the information.
4 That's -- again the sophistication of the regulators has to
5 parallel that of the industry to be successful in oil and gas.
6 So there's a huge investment in that regulator I would argue in
7 technology and training and skill set.

8 COMMISSIONER NORMAN: Are you familiar with the terms that
9 are attached to an approach -- a general approach to
10 regulation, prescriptive regulation versus safety case
11 regulation?

12 DR. MYERS: Uh-huh.

13 COMMISSIONER NORMAN: Do you have an opinion on which is
14 preferable or.....

15 DR. MYERS: I personally believe when you're dealing with
16 a sufficient number of unknowns and risk, a safety case is far
17 superior. It both allows you to assess the differences in the
18 case, the uncertainty in the information, and the potential
19 high consequences. For example, if you're in the middle of
20 Prudhoe Bay it's a very different case than if you're
21 developing Liberty. And say hypothetically that you decide to
22 do it from offshore, an offshore island, Liberty. All right.
23 The capacity of equipment, the timing, all sorts of
24 consequences, the unknowns are significantly greater at least
25 in the initial development stage. So understanding a safety

1 case makes a lot more sense rather than applying a cookie
2 cutter sense of regulations that were developed for a different
3 situation. So ultimately I believe again as we advance into
4 more hostile areas, hostile in respect to environmentally
5 challenged, more remote, safety cases are critical, a critical
6 component because you have to find a way to deal with the
7 unknown. And you have to do that through a series of scenarios
8 and what ifs. And in many case more belts and suspenders than
9 you might need in a very known environment where there's
10 potentially less risk.

11 COMMISSIONER NORMAN: I asked this morning and I was told
12 that it was a loaded question and I think the person who told
13 me that was probably correct, but I'm going to ask it again of
14 you because you've held the highest geologic position in the
15 country. Do you think that by putting significant areas
16 onshore and near shore in the United States off limits to oil
17 and gas E&P we have increased risk by pushing exploration
18 further out into some very deep waters?

19 DR. MYERS: It is a loaded question and I think the answer
20 is yes and no. First of all there's the old saying oil is
21 where you find it. So you can offer the most acreage in the
22 history of the United States in a single lease sale, if it's
23 not in a prospective area you haven't offered much. So it's
24 not an acre by acre type approach. When you look at the
25 various ways oil and gas is going, the first way is for a very

1 large accumulations in areas like the Beaufort, the Chukchi,
2 the deep water Gulf of Mexico, where you can find a very large,
3 single, conventional -- potentially a very large, single,
4 conventional accumulation. The other way onshore is looking at
5 areas -- and there's still large areas that are off limits like
6 offshore California that still has potential for very large
7 fields. The other big push onshore are for unconventional oil
8 and gas dominantly. And that's a very different game, that's
9 lower productivity, larger surface impact, smaller
10 accumulations. And -- but very relatively inexpensive to
11 develop, it's more of a manufacturing process, producing things
12 like shale gas, you know, it's pattern drilling, it's very
13 different and so you can predict the outcome. And if you look
14 at areas like the Bakken, if you can produce oil shales then
15 you -- and have sufficiency of price there's a lot of oil
16 there. So the paradigm is -- in my mind is very small,
17 conventional -- smaller conventional accumulations onshore
18 versus some very large nonconventional onshore versus large
19 accumulations in more remote areas offshore with the exception,
20 you know, we still don't know what's is ANWR, but the
21 prospective numbers are very large. Environmental opposition
22 is very large.

23 So fundamentally the country has to really make some
24 intelligent decisions on where it's going to get its energy.
25 If it wants to be energy independent it's going to have to look

1 at all those sources. If it wants to keep importing, but wants
2 to offset some of it, it can make choices about offshore versus
3 onshore.

4 The other big issue is gas versus oil. If we're
5 interested in gas, of course, you know, we have a very
6 different exploration profile than if we look at oil.

7 So a bunch of different decisions based on what you're
8 looking for and what the national goals are. And, Commissioner
9 Norman, if you could enlighten me on what the National Energy
10 Policy is we'd probably decide which of those three and how to
11 balance it.

12 COMMISSIONER NORMAN: Now that's -- that was a loaded
13 question. I have no further questions, Mr. Chair.

14 CHAIR SEAMOUNT: Okay. Thank you, Commissioner Norman.
15 Thank you, Dr. Myers, for a very well thought out argument and
16 I assume you're going to find a sponsor for all these
17 recommended changes to the statute, somebody in the Legislature
18 perhaps. But thank you for coming all this way.

19 DR. MYERS: You're welcome. Thank you.

20 CHAIR SEAMOUNT: Okay. Next on the agenda is Mr. Hal
21 Shepherd, Executive Director at the Kachemak Bay Conservation
22 Society. Welcome, Mr. Shepherd. And are you based in Homer?

23 MR. SHEPHERD: Yes, I am.

24 CHAIR SEAMOUNT: Okay. Well, thank you for taking the
25 time to make that long drive up here or.....

1 MR. SHEPHERD: Yeah.

2 CHAIR SEAMOUNT:flight or whatever you did, however
3 you got here.

4 MR. SHEPHERD: Thank you, Mr. Chairman and members of the
5 Commission for inviting me up to say our piece in regards to
6 the inquiries on this docket number. And I am -- just a
7 correction on my title, I am actually a consultant in -- based
8 in Homer and I'm representing the.....

9 CHAIR SEAMOUNT: Okay.

10 MR. SHEPHERD:Kachemak Bay Conservation Society on
11 these comments.

12 CHAIR SEAMOUNT: We will make that change.

13 MR. SHEPHERD: Okay.

14 CHAIR SEAMOUNT: What's the name of your company?

15 MR. SHEPHERD: Laoch, L-a-o-c-h, Consulting,

16 CHAIR SEAMOUNT: L-a-o-c-h. Okay.

17 MR. SHEPHERD: And, Mr. Chairman, we're -- I'm just going
18 to focus on three of the inquiries in the -- on the docket
19 number today that were -- as represented in the Notice of
20 Inquiry. And Notice -- the numbers 11 and 12 that focus on the
21 drilling, the readiness of operators and lessees to drill
22 relief wells and concurrent drilling of such wells offshore and
23 also item number -- inquiry number 13 about considering the
24 other jurisdictions and the policies and regulations in those
25 jurisdictions including foreign countries on -- specifically on

1 relief wells.

2 And also we're kind of -- can narrow down my talk a little
3 bit more. There's an awful lot of talk, discussion in Alaska
4 about the Arctic and drilling in the Arctic. And we are, of
5 course, concerned primarily with recent expansion of oil and
6 gas. As you all know the Escopeta Oil Company just started up
7 a drilling rig in the Northern Inlet and we've focused our
8 concerns on Cook Inlet oil and gas drilling in relation to
9 these inquiries.

10 And I want to follow-up on what Professor Myers had said
11 about -- in relation to voluntary method versus regulation on
12 this topic. And it was the Alaska Oilspill Commission at that
13 time that right after the Exxon Valdez incident stated that
14 state government was not fully prepared to oversee industry
15 operations or to ensure proper response capabilities in case of
16 accident. And also said that -- again in response -- as sort
17 of what came out of and as of -- as a -- looking at why the
18 Exxon Valdez incident took place, said private, voluntary
19 prevention measures though commendable are often ignored as
20 memories fade unless backed up by state regulations. So and
21 it's our concern that this is kind of what is arising today.
22 Right after the Gulf disaster, in fact, the Department of
23 Interior, we've talked -- Dr. Myers also talked about the MMS,
24 Minerals Management Service, and at that time the MMS had
25 failed to impose a full review of potential environmental

1 impacts of drilling operations in the Gulf based on conclusions
2 from preliminary reviews and environmental assessments that a
3 spill in the Gulf was unlikely.

4 And it's our concern that the unlikeliness approach as a
5 means of oil spill prevention is rearing its, if I must say,
6 ugly head again in Alaska. We have oil companies now who are
7 putting in contingency plans not as a -- not as a primary means
8 of preventing oil spills, but are stating that the event of an
9 oil spill in Cook Inlet or in Alaska in general is not likely.
10 There was a -- National Marine Fisheries Services recently
11 wrote a letter to the Army Corps of Engineers in response to
12 the Corps' determination that the impact of oil drilling in
13 Alaska on the endangered -- listed endangered Beluga whales
14 that oil drilling and permitting in Cook Inlet is unlikely to
15 adversely affect the Beluga. The NMFS actually admonished the
16 Corps in its recent letter to consider the factors other than
17 the low probability of a major blowout. I quote from the NMFS
18 letter, while we may agree that there is a low likelihood of a
19 large, catastrophic oil spill, the Corps has not determined
20 that the affects from such a spill are discountable.

21 So this argument is starting to -- again as the memories
22 are fading, I think, already or we believe already from what
23 happened in the Gulf and now we're starting to see the
24 unlikeliness argument coming back.

25 The Exxon Valdez -- and obviously our concern is that the

1 type of the -- the size of the spill that occurred in the Gulf
2 of that type and nature would wreak havoc on the extremely
3 unique natural wonders and fishery of the Cook Inlet. And as
4 also illustrated by evidence from Exxon Valdez of which there
5 is biological consequences still being determined from that
6 incident, that type of -- again that type of impact on the
7 fishery and the resources in Cook Inlet is pretty much
8 unacceptable.

9 So what do we do. And again Dr. Myers also talked about
10 the -- some of the laws, I think he was asked a question about
11 existing laws and regulations, legislative initiatives. We
12 believe that there are actually sufficient laws right now on
13 the books to -- as a result of -- and most of these were passed
14 as a result again of the Exxon Valdez incident, that require
15 offshore -- I'll start with the first inquiry, precedent for
16 requiring offshore or ultra extended reach wells to demonstrate
17 the ready capability to drill a relief well at the earliest
18 possible time. And I'm going to use a couple examples,
19 obviously this is a separate jurisdiction from the Commission,
20 the Department of Environmental Conservation has regulations
21 that primarily relate to best available technology. And we
22 believe that those -- the best available technology actually
23 requires that relief well to be the first -- one of the first
24 lines of defense against preventing blowouts and major spills.
25 In those regulations, this is another quote that I'm going to

1 read, contingency plans must provide procedures that are in
2 place to stop a discharge at its source within the shortest
3 possible times and plan strategies are sufficient to meet the
4 applicable response planning standard for containment, control,
5 recovery, transfer, storage and cleanup within the specified
6 time. Also regulations -- and these regulations are all cited
7 in my -- in our comments, I'll spare you from the citations.
8 These regulations include procedures to stop the discharge or
9 actually contingency plans must include procedures to stop the
10 discharge at its source and prevent its further spread. Any
11 discharge of oil shall be quote, immediately contained and
12 cleaned up.

13 And again best available technology at least as far as
14 Department of Environmental Conservation is concerned, the best
15 available technologies certainly include equipment, supplies,
16 other resources, but also includes quote, related practices.
17 So to the extent that relief wells can't be considered
18 equipment or supplies or some kind of technology in a strict
19 sense, we believe again they can be at least considered related
20 practices or the type of an action that somebody needs to take.

21 Another analogy is the federal government's regulations
22 and policies for offshore drilling. And this one is contained
23 in the federal government's information Requirements for
24 Expiration Plans, Development and Production Documents to
25 operators and lessees. Quote in that document, the

1 availability -- oil and gas -- operators must include the
2 availability of a rig to drill a relief well and rig package
3 constraints. Specify as accurately as possible the time it
4 would take to contract for a rig, move it on-site and drill a
5 relief well, including the possibility of drilling a relief
6 well from neighboring platform or onshore locations. Describe
7 the measures you propose that would enhance your ability to
8 prevent the blowout, to reduce the likelihood of a blowout and
9 conduct effective and early intervention in the event of a
10 blowout, including your arrangements for drilling a relief
11 well. So this -- obviously the federal government -- well,
12 maybe not obviously, but it implies -- we believe that language
13 that relief wells when you include it with the language such as
14 early intervention that relief wells are a primary means of
15 preventing at least spread of blowouts and controlling those
16 blowouts.

17 So again our opinion in almost every case, probably one of
18 the most frustrating things, I guess, is everybody is aware
19 blowouts are preventable, at least major blowouts. And the
20 worst blowout in American history, the Gulf spill, actually
21 occurred again as a result of a failure to -- in addition to
22 sort of the unlikelihood strategy, from a failure to apply
23 proper state and federal spill prevention laws, set up
24 safeguards such as testing of blowout prevention measures,
25 require adequate relief wells and set up adequate response

1 measures. And I was at the Pacific States and BC Oilspill
2 Taskforce meeting last -- well, it was about a month ago, it
3 took place in Anchorage and there was a lot of discussion about
4 the use of disbursements which turned out to be somewhat of a
5 colossal mess as a means to try to cleanup and control the oil
6 that had already escaped. And I guess our proposal or our
7 suggestion would be that if we -- if maybe they had applied
8 relief wells, I'm no scientist, of course, or geologist, but
9 maybe they would not have gotten into a situation where these
10 disbursements which have these mostly unknown environmental
11 consequences are being used rather heavily and with abandon.

12 Cook Inlet also has a aging infrastructure, oil and gas
13 infrastructure. The equipment -- availability of equipment and
14 personnel is not up to the -- to meet the needs should a large
15 spill or blowout occur. That also raises the risk.

16 And one of the -- one of the concerns or questions that we
17 have that if -- it seems to us again I have heard a lot of -- a
18 couple of reasons as to why relief wells maybe are not
19 considered as a primary means again and used early in the
20 process of blowouts or spills. A lot of it, of course, has to
21 do with economics, a lot of it has to do with the availability
22 of wells being not available -- the secondary well being
23 available and there's some other geological processes which I
24 will leave to experts, the geological experts. But it's very
25 strange to us that even though they seem -- there seems to be a

1 law there, it seems to be a very practical tool for preventing
2 and controlling blowouts, the mention of relief wells in
3 largely absent in agency and industry discussions. And an
4 example of this is during the 2004 what's called the Best
5 Available Technology conference in Anchorage was sponsored by
6 the ADEC, relief wells are not even included in the list of
7 technologies for that conference. But at the same time in the
8 report -- well, and in the report that the agency produced as a
9 result of that conference, you start to see some clues as to
10 why that may be the case. It says that such methods can only
11 be quote, indirectly -- can only quote, indirectly control
12 spills and blowouts and constitute the last resort, quote
13 again, for a well blowout. Then at the same time in the very
14 next sentence the agency says and I quote in the report, when
15 all else fails a relief well drilled to intersect the blowout
16 well may be the only option. And in some instances the only
17 practical way to control a well blowout, particularly for
18 offshore platforms, is to drill a relief well. Well, in our
19 case and particularly in Cook Inlet if it's the only practical
20 method that works, why not use it in the first place. If we
21 are -- especially now that we have this hindsight of what
22 happened in the Gulf. Do -- you know, do we really want that
23 to happen here. So if it's oftentimes the only practical
24 method particularly in offshore oil drilling, why don't we use
25 it right up front.

1 And the last thing I wanted to cover was the regulatory
2 requirements of other jurisdictions, that again is item 13 in
3 the inquiries. I'm going to focus just on some of the
4 standards that relate to relief wells. In Montara -- for the
5 Montara well had platform off the coast of Australia. A
6 Commission was put together by the Commonwealth of Australia, I
7 think that's what you call it, called the Australian Montara
8 Commission which drafted an inquiry, it was a report that
9 focused on recommendations for preventing the same type of
10 incident that happened, the Montara wellhead incident. And
11 what happened there was ultimately the only thing that
12 controlled that blowout was a relief well. So the Montara
13 Commission said the regulatory regime, this is again in making
14 recommendations for what kind of laws and regulations the
15 Commonwealth should draft, the regulatory regime should impose
16 an obligation on all operators to ascertain the availability
17 and provide details to the regulator of any potential relief
18 well rigs prior to the commencement of drilling operations.
19 And the Commonwealth of Australia, the government basically
20 responded by saying quote, the recommendation in the report
21 should be identified and considered as part of the process for
22 seeking approval to undertake an offshore petroleum activity.
23 Recommendation identified meaning the use of relief wells as
24 suggested.

25 The Canadian Minister of Natural Resources has been quoted

1 as saying that no offshore drilling can take place in Canada
2 unless the operator submits a relief well capacity plan to the
3 responsible agency. That plan must spell out and plan -- and
4 plan a contingency for relief wells. Also in Canada the gas
5 operators are expected to have survey tools and data capable of
6 determining the location of the wellbore with sufficient
7 accuracy to enable relief well drilling operations.

8 So that is my comments. And also I'm not sure exactly,
9 Mr. Chairman, what the protocol is, we have developed a white
10 paper that pretty much discusses what I -- what my comments
11 were about in relation to applications of relief wells to
12 prevent blowouts and control spills in Cook Inlet and if I may
13 I'd like to submit that to someone for the Commission to
14 review.

15 COMMISSIONER NORMAN: Mr. Chairman, I move that Mr.
16 Shepherd's white paper be accepted into the record.

17 COMMISSIONER FOERSTER: I'll second that motion.

18 CHAIR SEAMOUNT: All in favor say aye.

19 IN UNISON: Aye.

20 CHAIR SEAMOUNT: Okay. Mr. Shepherd's papers are accepted
21 to the record. I guess I better look at it so I can
22 appropriately describe it.

23 COMMISSIONER FOERSTER: That will be the best way to make
24 them available to the public is to make them part of the
25 record.

1 MR. SHEPHERD: Okay.

2 CHAIR SEAMOUNT: So, Ms. Fisher, can you bring them to me
3 or to us?

4 Okay. We've already voted on something we haven't seen
5 yet, but based on testimony by Mr. Shepherd we have accepted
6 into the record, it's called Application of Best Available
7 Technology and a Zero Discharge Standard to Cook Inlet Oil &
8 Gas Development by Hal Shepherd, Policy Consultant, Kachemak
9 Bay Conservation Society and it is 17 pages long.

10 Okay. Commissioner Foerster, do you have any questions or
11 comments?

12 COMMISSIONER FOERSTER: I have a comment. First, Mr.
13 Shepherd, thank you very much for coming here today. I hear
14 lots of frustration in your voice and, you know,
15 acknowledgement that as someone who lives in Homer, a beautiful
16 place, you are proud of it, you love it, you want to keep it
17 the way it is. You feel that the potential to have drilling
18 off your porch provides lots of unknowns, lots of technology
19 that you can't and shouldn't be expected to understand, lots of
20 risks and that you have little ability to control that. And
21 I'm trying to understand, you know trying to put that into a
22 connotation that I can relate to. It's like going to the
23 doctor and having him spit out these seven syllable
24 descriptions of what's wrong with you and how he's going to fix
25 it and you just want it boiled down to you're going to cut

1 where, why and how good am I going to feel when you're done.
2 And so I hear your frustration, I understand it, it's
3 completely rational and we and the other agencies in this state
4 have a huge responsibility to you and the rest of the citizens
5 of the state. I hope you trust that we take that
6 responsibility very seriously. We don't have all the answers,
7 but we are working really hard to try to do the best that we
8 can. And that's all I can tell you and it's not much, but it's
9 better than nothing. But thank you for coming.

10 MR. SHEPHERD: Yeah, I appreciate that.

11 CHAIR SEAMOUNT: Commissioner Norman.

12 COMMISSIONER NORMAN: Yes. No question, just also to add
13 my thanks to you for taking the time to come, Mr. Shepherd.

14 MR. SHEPHERD: Thank you.

15 CHAIR SEAMOUNT: Okay. Mr. Shepherd, I think if I read
16 your statements correctly that you would like to have a relief
17 -- to require a relief well actually drilling concurrently with
18 the exploration well being drilled, is that correct?

19 MR. SHEPHERD: Thank would be our preferred option and the
20 other option would be sometime immediately, whatever that
21 means, after the original well is drilled.

22 CHAIR SEAMOUNT: So the Canada requirement is not perfect
23 to you, right, because they don't have to start drilling until
24 they have a problem?

25 MR. SHEPHERD: Right. And the government didn't even

1 accept totally the recommendations of the Commission, they
2 didn't make it law based on the recommendations that.....

3 CHAIR SEAMOUNT: Okay.

4 COMMISSIONER FOERSTER: I have a question.

5 CHAIR SEAMOUNT: Commissioner Foerster.

6 COMMISSIONER FOERSTER: I'm sorry, I didn't understand
7 that you were recommending concurrent relief well drilling so I
8 do have a question for you. What do you do if you get a
9 blowout in the relief well?

10 MR. SHEPHERD: Yeah. Again that's.....

11 COMMISSIONER FOERSTER: Or both of them?

12 MR. SHEPHERD: You know, I.....

13 COMMISSIONER FOERSTER: You just doubled your problem.

14 MR. SHEPHERD: And I'm not a scientist or a geologist, I
15 don't know what you would do, I don't have an answer for that.
16 My question would be as sort of the typical layman is how
17 likely is it to have two blowouts right after the other, is
18 it.....

19 COMMISSIONER FOERSTER: If you're drilling right into the
20 same area and it's a problem area.....

21 MR. SHEPHERD: Okay.

22 COMMISSIONER FOERSTER:then, you know.....

23 MR. SHEPHERD: Then it's likely?

24 COMMISSIONER FOERSTER: Yeah.

25 MR. SHEPHERD: Okay.

1 CHAIR SEAMOUNT: Okay. We -- I'd like to thank you, Mr.
2 Shepherd, and we're going to take your recommendations and
3 seriously consider them.

4 MR. SHEPHERD: Thank you.

5 CHAIR SEAMOUNT: Thanks for coming up. Can we take our
6 break? Okay. We'll take a 10 minute break, we'll come back at
7 3:10 to hear what Ms. Lois Epstein, Professional Engineer, has
8 to say. Oh, it's 3:00 o'clock. Off the record.

9 (Off record - 3:00 p.m.)

10 (On record - 3:14 p.m.)

11 CHAIR SEAMOUNT: Okay. On the record. It is 3:14 and our
12 next speaker will be Ms. Lois Epstein, Professional Engineer,
13 Engineer & Arctic Program Director for the Wilderness Society.
14 Welcome, Ms. Epstein.

15 MS. EPSTEIN: Thank you.

16 CHAIR SEAMOUNT: It's nice to see you again.

17 MS. EPSTEIN: Thank you, Chairman Seamount and
18 Commissioner Norman and Commissioner Foerster, nice to see you
19 all as well. And like others I very much appreciate your
20 holding this hearing, I think it's an important one for the
21 state. And it's wonderful that you're taking a thorough look
22 at where we are, where we need to go. I also appreciate your
23 efforts to bring up some experts from other parts of the
24 country. As it happens I have had interactions with both of
25 them in my past life in Washington, D.C., and I was glad to see

1 them again as well as, you know, to hear what they had to say.

2 So I'm going to talk about a number of topics, some of
3 which we've heard some comments about today and then a few new
4 details especially about the new BOEMRE/Coast Guard report that
5 came out. I did my best to try and go through some of the
6 recommendations in there and -- so I can incorporate them into
7 my testimony today. And I guess it was both fortuitous and not
8 that it came out yesterday that we do get to have the benefit,
9 but we don't have as much time to review it before this meeting
10 as we could.....

11 CHAIR SEAMOUNT: Yeah, we'll be giving people time.

12 MS. EPSTEIN:and it would be great if you could
13 extend the comment period as well as a result of that, but
14 we're glad it's out now.

15 For those of you who don't know me I thought I'd give a
16 really brief discussion of my background. I've served on
17 several federal advisory committees, the most relevant ones are
18 the U.S. Department of Transportation's Oil Pipeline Committee
19 which is actually where I met Bud Danenberger, he was also on
20 the Committee. I did that for 12 years and since the BP Gulf
21 spill I've been appointed by the Secretary of Interior to serve
22 on the Offshore Energy Safety Advisory Committee, we're just
23 ramping up our work now. I've provided invited testimony to
24 Congress on numerous occasions almost entirely on oil and gas
25 issues. I've worked on hazardous waste a long time ago. And

1 most recently I was invited by the Co-Chairs of the Senate
2 Energy & Natural Resources Committees, Senator Murkowski and
3 Senator Bingaman, to testify at a hearing this past May on
4 development in upstream oil and gas technologies. I'm a
5 licensed engineer, I also like Bud have served as an advisor to
6 the Department of Interior on their report that they developed
7 in the months after the BP Gulf spill, it was a technical
8 report, I was one of the advisors on that. And I've been
9 working in Alaska for the past 10 years, about half the time
10 was on Cook Inlet related infrastructure issues and most
11 recently I've been working on Arctic onshore and offshore oil
12 and gas infrastructure issues.

13 And just a quick background about the Wilderness Society
14 and my work there. The organization has -- is a public lands
15 protection organization, I'm sort of a new beast over there
16 where I'm not a biologist or ecologist looking at where
17 something should occur, but I actually work on how it should
18 occur and obviously very relevant to the work here. And if I
19 had to encapsulate my work I would say it's to ensure the best
20 possible performance for existing and future oil and gas
21 operations. And because I know enough about what can happen if
22 things don't go right I am able to provide the folks who are
23 working on protection some information about what would happen
24 if there would be oil and gas development in certain areas.
25 And so that enables them to move forward with the mission of

1 protecting sensitive areas from new resource development. And
2 just in terms of our presence here we have about 1,800 members
3 and supporters in Alaska, but we are a national organization
4 and I actually can't remember what the number of members and
5 supporters are nationwide.

6 The three topics I'm going to speak to are industry
7 standards and go into a little more detail than we've heard
8 earlier today, but I will discuss the should and shall question
9 that we've had some comments on. But some other concerns I
10 have with incorporation of industry standards and there are
11 solutions to these concerns, but I think it's important to lay
12 them out. And some enforcement issues and inspections and
13 enforcement I know is part of your list of topics you're
14 interested in hearing about. And then I'm going to look at
15 three reports that have been completed since the Deepwater
16 Horizon and pulling out some key recommendations from there.
17 They were made at the federal level, but I have the -- I'll be
18 able to talk about them at the state level and things that the
19 state should be doing that might be helpful right now and are
20 applicable at the state level.

21 Okay. My experience has been with industry standards that
22 it's been -- and this comes from serving on these federal
23 advisory committees and having worked with regulations and
24 incorporation of the standards into both the federal and the
25 state regulations is that there are occasions where the

1 standards are unfortunately lowest common denominator. And
2 that comes about because they are developed generally by
3 consensus, and I understand that, the -- in order to get
4 consensus you might have to maybe not go as far as some of the
5 more forward thinking companies might be interested in doing.
6 So that's a concern I have whereas when you're developing
7 regulations there's no need to necessarily go with the least
8 common denominator approach.

9 Industry standards can be unenforceable, they do
10 incorporate words like should rather than shall and we had some
11 good discussion earlier today about if there's flexibility
12 within the industry standard but the regulator mandates that
13 they be used whether their -- the industry is legally required
14 to meet what's in those standards. But I suppose -- I'm not a
15 lawyer, but I have heard the legal argument made by others that
16 they -- that there's a reason for flexibility and it's not --
17 and some of it is legitimate because there's not always a
18 clear, single answer, there are always tradeoffs with
19 approaches and there might be site specific reasons why there
20 was not a clear mandate and a standard.

21 So it's a complicated issue, but again if we look at the
22 regulator's model some of the -- much of those -- that
23 flexibility could be eliminated and if appropriate that might
24 be the right thing to do.

25 Another thing about industry standards is that even on

1 specific topics they might contain gaps and that might be
2 because they're -- they couldn't even come to a consensus on a
3 certain issue. Sometimes the gaps are intentional, that
4 there's a reason that the participants decided they didn't want
5 to address a particular issue, better to leave it unaddressed
6 for a while. And from a safety standpoint that may be
7 unfortunate, but, you know, it can occur.

8 The next point is a process point that the standards are
9 developed with -- generally with little or no public input.
10 Sometimes there's state input. I as a member of the public
11 actually welcome that because I think the state experts serve
12 as our surrogates as, you know, in terms of protecting the
13 public interest. But states as we know are under enormous
14 budget constraints and they can't always participate to the
15 level that they would like to and generally there'll be a lot
16 more industry participants there. And so we don't always have
17 a level playing field.

18 And then last the standards are not always available to
19 the public so even if they wanted to weigh in and comment, if
20 they wanted to review them after to see whether there are gaps,
21 it's not always possible, sometimes they're hundreds of
22 dollars. Interestingly Director Bromwich at the Bureau of
23 Ocean Energy Management, Regulation & Enforcement, he has told
24 this story that when he first arrived and found that the
25 standards were not available he was shocked as someone who

1 comes with an enforcement background so that they -- you know,
2 it basically was something that he felt was very much
3 unacceptable, that you couldn't gain access to those standards
4 without paying hundreds of dollars, that's not how government
5 should work, it's not transparent, it doesn't foster innovation
6 in the public policy sphere and moving forward by not having
7 those available. And he to his credit was able to work with
8 the American Petroleum Institute and now those American
9 Petroleum Institute standards are available and that's been
10 helpful not just in the offshore realm, but also in the pipe
11 line realm. There are some other standards making
12 organizations that have not followed yet, maybe they will and I
13 hope to see that.

14 So just to list some recommendations based on those
15 concerns, you know, how should AOGCC address some of those
16 concerns. Participating in standards development if at all
17 possible, especially key standards. I know you all have to
18 pick and choose what areas you can work in. Review the
19 standards for enforceability and that means going through them
20 and deciding whether the shoulds are there for a technical
21 reason or if they're there because it just got put in to give
22 industry more flexibility and not have them as enforceable and
23 fix that within the regulatory framework. Also review them
24 obviously for gaps and that's got to be done with all the
25 engineers and technical expertise you have at your disposal.

1 And ensure that the standards address both those, both the
2 enforceability and the missing topics and to the extent
3 possible have them made available on the web, on the internet.
4 And that may be a bigger issue than AOGCC can work on, but it
5 doesn't hurt to ask to see if those things are possible if you
6 incorporate standards that are being incorporated nationally.

7 In terms of enforcement first off I have to say that I was
8 a little bit disappointed by Mr. Myers' answer to your
9 question, Commissioner Norman, about following up on Governor
10 Freudenthal's statement that he would hope that a reporter
11 could come to anyplace in the state where there are oil and gas
12 operations and find that there was substantial compliance.
13 And, you know, I understood where Mr. Myers was coming from,
14 but I wonder if you ask that same question in other states
15 whether you would get a similar answer. And I personally
16 believe that the state of Alaska has an extremely poor track
17 record on enforcement, I'm talking about multiple agencies, not
18 specifically AOGCC. I'm -- I have written a report a number of
19 years ago looking at DEC's enforcement track records and found
20 that some of the biggest incidents were there was no
21 enforcement, very -- tailpipe violations were getting
22 enforcement and that was probably related to the fact that the
23 state would lose money if there were air quality issues in
24 Fairbanks and Anchorage. So, you know, in terms of being the
25 regulator that -- and Mark Myers did talk about the importance

1 of, you know, being out there and doing a good job and doing
2 the enforcement as needed. You know, as a member of the public
3 I would say there's a good distance to go before I'd feel
4 comfortable and feel that the state is doing a good job. And
5 frankly there's a bit of a conflict of interest or at least a
6 perceived one by some decision makers that if we were to do
7 enforcement then maybe we wouldn't attract as many operators,
8 but I would assert that the good operators would certainly come
9 here because they have no fear of enforcement.

10 So just to layout an enforcement philosophy which I'm not
11 sure the state has and certainly welcome comments on this, I
12 would argue that effective enforcement, and this -- these are
13 recommendations that came out of the analysis that I did a
14 number of years ago, you certainly want to look at incidences
15 where violations result in harm to human health or the
16 environment. Those are the ones that you want to put some
17 emphasis on because those are very serious violations. Equally
18 serious are violations that may not have resulted in human
19 health or environmental harm, but were -- could have and came
20 close, the near misses, but also things that were, you know,
21 serious violations and intentional violation and things like
22 that. And then ongoing violations are also things to look at
23 because they can lead to a much greater problem. So even if
24 they're violations of relatively minor pieces of equipment, for
25 example, and their requirements, you know, they can in the

1 future lead to something much more major.

2 From my conversations with industry and others, you know,
3 I would -- and it would be nice to -- for the state of Alaska
4 to have an enforcement policy or maybe even within particular
5 departments or within the Commission that this is -- these are
6 the components I would put into that policy, that effective
7 enforcement needs to be fair, it needs to be clear, it needs to
8 be consistent over time and over space with different
9 operators. It also needs to be attention getting in the sense
10 that it -- an operator that has a violation needs to have a
11 penalty or some other form of enforcement that's meaningful,
12 that it gets the attention, not just necessarily at the site,
13 but also at higher levels. And I would even argue that a very
14 serious violation needs to have a press release and needs to,
15 you know, get the attention of the public at large. And that
16 would increase public confidence in the system and also it
17 makes sure that higher management is paying attention to the
18 fact that there was a serious violation.

19 And one of the things we -- a number of us that were --
20 have worked on pipe lines have encouraged and been very happy
21 about is how the Federal Pipeline Office has moved towards
22 putting inspection data and enforcement data online, you know,
23 so that we could look at different regions and make sure that
24 different regions are getting consistent levels of enforcement.
25 And the penalties, you can compare the penalties that are being

1 levied for what types of violation. So it ensures good
2 government, it ensures transparency and accountability on the
3 part of government. And it does enable you to look at trends
4 over time so with different Administrations we might have
5 different levels of enforcement.

6 Okay. Now getting to the findings from the Deepwater
7 Horizon incident and the investigations that have been
8 completed. And I see myself as a member of the public interest
9 community as someone who, you know, wants to see the key
10 recommendations implemented and as a technical person I think
11 I'm able to sort of tease out some of the key recommendations,
12 but also serving on the Committee making sure that, you know,
13 we keep reminding BOEMRE they have responsibilities to make the
14 particular changes that were developed by folks that have a lot
15 of knowledge.

16 So the three reports I'm going to talk about today that
17 have been completed and they're -- Melinda had a long list of
18 other reports, some of which have been completed, some haven't,
19 but the three reports I'm going to focus on were the report
20 that I was an advisor on that came out approximately one month
21 after the Macondo tragedy, I'm going to talk about the report
22 that was released yesterday, the -- from BOEMRE and the Coast
23 Guard and, of course, the President's Commission report that
24 came out last January.

25 Some of these -- of course, these findings were directed

1 towards Congress, toward federal agencies, but a number of them
2 have applicability at the state level and those are the ones I
3 included in the presentation. In terms of legislative needs,
4 obviously adequate, stable and secure funding on an ongoing
5 basis is essential. Liability and financial responsibility so
6 that when there is an incident there will be the resources to
7 pay to address the spill response compensation, any other
8 resulting needs. Whistle-blower protections, also important at
9 the federal level. And I don't know some of these -- I welcome
10 those in the audience or the Commissioners if they know if some
11 of these are already in place adequately at the state level,
12 but I'm raising them as important things that need to be
13 addressed.

14 In terms of regulatory needs, I don't think this will
15 surprise folks that have been following the -- what's come out
16 of the Deepwater Horizon investigations. Blowout preventor
17 equipment certification, configuration and other blowout
18 preventor upgrade rulemaking, there were numerous
19 recommendations made in the regulatory realm and I think those
20 are going to take some work on the part of AOGCC Staff to look
21 at those and see which -- how your regulations compare to what
22 those recommendations contain.

23 Personnel training requirements. And I would add that
24 training is one thing, but ensuring operator qualification is
25 another. Those are separate sections in the pipe line

1 regulatory structures. I have not seen in those reports that
2 caveat and I add that from my own personal experience, I think
3 that that is important. That's the kind of thing that the
4 industry -- the companies can do on their own as long as there
5 are regulatory criteria they need to meet.

6 State of the art casing and cementing rulemaking. Again
7 there were numerous recommendations made including many
8 recommendations related to integrity -- well integrity testing.

9 The reports also said that the regulatory agencies need to
10 review and consider incorporating the highest international
11 standards that are in place. Again that would take some Staff
12 time and possibly that's ongoing at the federal level and there
13 may be some summaries that could be available to AOGCC.

14 And I think Bud this morning gave a good review about
15 detailed incident reports and the need for that kind of data
16 including why it has to be done at the regulator -- at the
17 required level, that can't be discretionary. The needs that
18 seem most pressing include better causal information and
19 information on near misses and all that needs to be made
20 publicly available. Near misses, I understand there are some
21 complicated circumstances where that may not be best to be made
22 publicly available, but I think that's -- we should make our
23 best efforts to figure out a structure that works for everyone.

24 Also the -- I wanted to point out that the report released
25 yesterday does include recommendations for improvements in

1 inspections.

2 I have tried to compile in more detail and with footnotes
3 a short paper that is called Effective Oversight Requires Key
4 Legislative, Regulatory, Enforcement and Transparency Upgrades.
5 I have that with me, I'd very much like if I might ask to have
6 that put in the record. So this is -- this is a paper that's
7 not specifically directed to AOGCC, but does compile the key
8 recommendations from these three reports.

9 CHAIR SEAMOUNT: Ms. Fisher.

10 MS. EPSTEIN: And then I wanted to add two additional
11 points that I think are important and should be considered. We
12 all know that yesterday's report was required by statute, but
13 it was done by BOEMRE and the U.S. Coast Guard. It's very
14 tough to investigate yourselves and look for your own
15 deficiencies. We heard from Bud this morning that the two
16 entities couldn't work together easily, they -- essentially two
17 separate reports even though it's called a joint investigation
18 team.

19 In my experience the best model for accident
20 investigations is the National Transportation Safety Board
21 model, the Chemical Safety & Hazard Investigation Board, a much
22 smaller agency was built on that model. But essentially what
23 you have is a team of technical experts and the Chemical Safety
24 Board is very familiar with the oil and gas industry, they were
25 involved in the Texas City investigation. They are a little

1 bit resource limited whereas NTSB because of all its aviation
2 work has a much bigger staff, but that model which -- and I
3 thought a lot about how that could apply at the state level
4 whereas maybe the state could have some independent skilled
5 contractors that could come in if there were accidents and be
6 able to do the investigations that need to be done. It's very
7 helpful and the recommendations generally apply to both the
8 regulators, sometimes to the trade associations and also to the
9 operators and their contractors. So I think that's something
10 AOGCC should consider.

11 And last I just wanted to mention that my organization and
12 a number of colleagues from a conservation community do support
13 simultaneous relief well capability requirements and there
14 we're talking about -- and I glanced at the North Slope
15 Borough's comments, very similar to what they are talking
16 about, just ensuring that there be that capability with rapid
17 ability to be implemented nearby in the offshore.

18 So that's my last slide and I thank you very much for the
19 opportunity to testify today and happy to take any questions
20 you might have.

21 CHAIR SEAMOUNT: Thank you, Ms. Epstein. Before we --
22 we're going to take a five minute break -- recess at the
23 request of Commissioner Foerster. Before we do -- and then
24 we'll come back to questions for you.

25 MS. EPSTEIN: Okay.

1 CHAIR SEAMOUNT: And we have a paper called Effective
2 Oversight Requires Key Legislative, Regulatory, Enforcement and
3 Transparency Upgrades, by Lois Epstein, P.E. It is three
4 pages. Do I hear a motion?

5 COMMISSIONER FOERSTER: I move we accept this into the
6 record.

7 COMMISSIONER NORMAN: Second.

8 CHAIR SEAMOUNT: Anybody opposed?

9 (No opposing votes)

10 CHAIR SEAMOUNT: Hearing none, the -- this document is
11 moved into the record.

12 And we'll take a five minute recess. It is 3:40 and we'll
13 try to be back at 3:45.

14 (Off record - 3:40 p.m.)

15 (On record - 3:53 p.m.)

16 CHAIR SEAMOUNT: We're back from our recess, it is 3:53
17 and we're on the record. And I think it's Commissioner
18 Norman's turn to go first with the questions.

19 COMMISSIONER NORMAN: Okay. I have only a few questions,
20 Mr. Chairman.

21 Ms. Epstein, you identified and I'd like you to expand on
22 something that bothers me, has personally bothered me as just
23 one member of the Commission. I don't -- haven't really had a
24 chance to discuss it with the other Commissioners. And that is
25 availability, ready availability, to the public of these API

1 standards, recommended practices, et cetera. We did look into
2 it and the Commission Special Assistant contacted API and we've
3 tried to work through that. But I would like -- I would be
4 interested right now, and here's my question, in knowing what
5 you know about the availability of those to a member of the
6 public and then secondly would like to invite you to stay in
7 touch with us on that because to me that's something that we
8 have to work through. It seems very counter-intuitive and
9 foreign to me to have a body of law that incorporates by
10 reference a standard and then the person wanting to know what
11 the law is must pay a fee to find it out.

12 MS. EPSTEIN: What I understand happened was when Director
13 Bromwich spoke with API and he was likewise concerned about
14 that, he said, you know, he thinks, you know, do you want me to
15 make a big deal, he's quite outspoken on a number of issues and
16 he was willing to do that and they figured out a way to make
17 the standards read only. So not downloadable, but that's, you
18 know, more than acceptable essentially. So the American
19 Petroleum Institute has done that. I think the National
20 Association of Corrosion Engineers has done that, but possibly
21 some other, ASME possibly have not at this point. So, you
22 know, it's becoming more and more available it seems, the
23 precedent has been set. And, you know, having it read only is
24 really helpful because, you know, most of us as members of the
25 public don't need to have the large copies because we're not

1 going out at different facility levels and looking at things.

2 COMMISSIONER NORMAN: Okay. Well, I thank you for
3 bringing that to light. And we were on a parallel path with
4 you working this down. And so without taking the time of the
5 hearing I would invite you to share any additional information
6 you have and we intend to pursue that also.

7 I'll move on to a second question. In 2007 the Commission
8 did go to the Legislature and in an overhaul of the Oil & Gas
9 Conservation Act we changed the penalty provisions to dial them
10 up substantially so that the Commission has the ability now to
11 levy a penalty of up to 100,000 for the initial violation and
12 10,000 for each subsequent day. And then we wrote in criteria
13 which the law does require, we just can't have unfettered
14 jurisdiction to impose penalties as you know, but there are
15 some standards and measures there and there are nine statutory
16 criteria. I won't read them now, but I would ask if you're
17 familiar with them and if you think that something else should
18 be added.

19 MS. EPSTEIN: You know, I would love to take a close look
20 at those and work with you and give you some feedback.

21 COMMISSIONER NORMAN: Very well. I'll give you the quick
22 cite then, it's in 31.05.150. And we'll provide before the end
23 -- before you leave here we'll provide a copy of that for you
24 so that you have that in front of you.

25 My last question, you mentioned something that we've hit

1 around at, but that I believe -- I don't know quite how you put
2 it, but I believe you mentioned that there needed to be more
3 attention on operator qualifications. And I wonder if you
4 could elaborate on that, qualifications could mean experience
5 in drilling, it could mean experience in drilling in a
6 particular area, it could mean -- often it means financial
7 strength of the operator to be able to deal with emergencies
8 and I wondered what you meant by that?

9 MS. EPSTEIN: I was particularly referring to the training
10 element, making sure that someone isn't just trained, they need
11 to maybe pass a test or something to show that they've learned
12 the material or maybe observed by those who have much more
13 experience and they have the right responses. So I was
14 specifically looking at it in terms of ensuring that the
15 training is effective.

16 CHAIR SEAMOUNT: Thank you, Commissioner Norman.
17 Commissioner Foerster.

18 COMMISSIONER FOERSTER: I have a few questions. First you
19 mentioned simultaneous relief well capability. Do you mean
20 having a second rig available to drill a relief well or do you
21 mean having simultaneous drilling operations?

22 MS. EPSTEIN: Having it available nearby and able to begin
23 operations very.....

24 COMMISSIONER FOERSTER: Able to respond.

25 MS. EPSTEIN: Exactly, you know.....

1 COMMISSIONER FOERSTER: Okay.

2 MS. EPSTEIN:if there is an incident.

3 COMMISSIONER FOERSTER: Okay. For.....

4 MS. EPSTEIN: And that's why I underlined capability.....

5 COMMISSIONER FOERSTER: Okay.

6 MS. EPSTEIN:I know it's important that we --

7 everybody be clear about the terms, but yeah, that's what we're

8 talking about.

9 COMMISSIONER FOERSTER: Right. Because for people less

10 informed that you it's a confusing topic and they don't know

11 the difference between simultaneous.....

12 MS. EPSTEIN: Okay. I understand.

13 COMMISSIONER FOERSTER:and, you know, could -- would

14 you address your opinions on simultaneous drilling?

15 MS. EPSTEIN: Sure. I am not referring to drilling two

16 wells at the same time.....

17 COMMISSIONER FOERSTER: Because?

18 MS. EPSTEIN:because that would increase the risk,

19 in fact, it would double it.....

20 COMMISSIONER FOERSTER: Thank you.

21 MS. EPSTEIN:of a potential problem. What I am

22 referring to is having the ability to drill a relief well and

23 begin that drilling as close to the time.....

24 COMMISSIONER FOERSTER: As soon as the need is identified.

25 MS. EPSTEIN: Right. Right. And I notice that the North

1 Slope Borough in their comments was talking about it within 24
2 hours.

3 COMMISSIONER FOERSTER: Thank you. Second question. You
4 talk about industry standards and the lowest common denominator
5 and certainly anytime you have to go to consensus you can't
6 agree on everything, but do you have any thoughts on the value
7 or the difference in value between industry standards and
8 individual company internal standards?

9 MS. EPSTEIN: Well, that takes the question of making
10 those available to even one level further removed because a
11 company standard, there's -- you can't even necessarily
12 purchase at any price whereas an industry standard at least is
13 purchasable, hopefully it will be free as we discussed and
14 freely available. You know, I guess protocols within
15 particular companies -- every organization has their own
16 internal protocols. I encourage particular companies if
17 they're proud of, you know, their -- what they've developed to
18 make that available publicly. I see one of my roles as to
19 bring the lagers in the oil and gas industry up to the level of
20 the leaders and, you know, presumably those who are doing a
21 good job would be interested in seeing a level playing field
22 and seeing others moved up. And pieces of it might end up in
23 regulations so maybe they won't want to put those out there,
24 but, you know, I think it's important to have this discussion.
25 Am I addressing your question?

1 COMMISSIONER FOERSTER: Yes. So to the degree that we are
2 able to get from -- you know, we as a regulatory body are able
3 to get from individual companies their internal standards and
4 policies, do you think that there would be value in us
5 incorporating what we have gleaned from those to be the best
6 practices from one place to another into our regulations?

7 MS. EPSTEIN: Yes, absolutely. And just to add on that,
8 we had some discussion earlier today or heard some discussion
9 about the safety management systems and sometimes referred to
10 as safety and environmental management systems, that's the new
11 rules that BOEMRE has issued and is continuing to issue. That
12 is an element that seems to be missing from AOGCC's regulations
13 so far, it is voluntary right now to have safety and
14 environmental management systems. There's no process safety
15 management requirements or SEMS (ph) requirements. And I think
16 that is a useful discussion, I personally don't think it's
17 necessarily a panacea to, you know, fix everything, but I --
18 there are companies that already are well beyond any possible
19 regulations in that area that I think you could put out because
20 some companies are very advanced, but it does get at the
21 industry culture and the safety culture issue and maybe that is
22 something that it makes sense to be looking at. And I would
23 support further inquiry into -- by AOGCC in that area.

24 COMMISSIONER FOERSTER: You put up a couple slides that
25 listed issues that we needed to address about fairness,

1 consistency, focusing on serious violations and that sort of
2 thing, are you suggesting that you in your evaluation of our
3 regulations that we are not doing that and if so I'd like you
4 to identify where those places are because we're here today to
5 identify inadequacies and gaps and address so. So please be
6 specific if that's what your intent was.

7 MS. EPSTEIN: I was -- I think my frustration lies with
8 the state at large, not specifically with AOGCC in terms of
9 enforcement. I think the state needs to have an enforcement
10 strategy, I think that needs to be -- everybody should be able
11 to have access to that, the public, the operators, you know, so
12 that there's an awareness that if you do have some sort of
13 violation there are going to be consequences. And then putting
14 out a statement of principles is valuable. So it wasn't meant
15 to be specific because I was knowledgeable of particular
16 instances where that's not occurring, I'm more frustrated that
17 very -- there's inadequate enforcement at the state level and
18 to some extent at the federal level as well, but what I do know
19 is that there are examples of good enforcement, the BP North
20 Slope spills in 2006 that came from transit lines, the
21 settlement agreement I think is very strong, it's a \$25 million
22 settlement, it puts in place requirements for flow lines that
23 are not regulated by the federal government so it does set a
24 precedent, but also addresses an important issue and that was
25 done by the Department of Justice, EPA and SEMPS (ph) of the

1 pipe line agency. And so I think there are examples of good
2 enforcement and I have seen examples of leveraging that good
3 enforcement, this is not necessarily the case here, but, you
4 know, basically getting the word out that this kind of case
5 could be brought and, you know, as an operator I don't -- you
6 know, I don't think there's anyone that would want to see that
7 happen to them.

8 COMMISSIONER FOERSTER: Okay. I have one more questions
9 it's along the same lines because again we are specifically
10 trying to address inadequacies and gaps that may or may not
11 exist in our regulations. So in your review of our regulations
12 did you identify any gaps or inconsistencies or inadequacies
13 that we could learn from?

14 MS. EPSTEIN: You know, I basically wanted to focus my
15 energy on, you know, what was coming out of the different
16 investigations on Deepwater Horizon and I think that requires a
17 very, very detailed analysis that I just -- given all the work
18 I'm doing I didn't have the time to undertake to do a
19 comparison of the recommendations and where AOGCC regulations
20 are. So I'm hoping that at the Staff level at AOGCC can do
21 that, can actually make that direct comparison rather than
22 having me or someone else from outside AOGCC.

23 COMMISSIONER FOERSTER: So you just want to help us
24 analyze the reports that were coming out and give your
25 perspective on what was most important from those.....

1 MS. EPSTEIN: Exactly.

2 COMMISSIONER FOERSTER:not any implications as to
3 what we needed to do ourselves?

4 MS. EPSTEIN: Right.

5 COMMISSIONER FOERSTER: Okay.

6 MS. EPSTEIN: But I think it's going to need a fine tooth
7 comb and it's going to require a lot of hard work and.....

8 COMMISSIONER FOERSTER: That's why we're here today.

9 MS. EPSTEIN: Yes.

10 COMMISSIONER FOERSTER: Thank you. That's all I had.

11 MS EPSTEIN: I'm sorry I couldn't give you -- you know,
12 hand it over to you as an already done deal, but.....

13 COMMISSIONER FOERSTER: You know, maybe next time. Thank
14 you. That's all I had.

15 CHAIR SEAMOUNT: Thank you, Commissioner Foerster. I
16 think all my questions have been addressed by the other
17 Commissioners. Our enforcement orders are on the web if you're
18 interested in looking at them or know anything. I would invite
19 you to examine our website if you haven't already and if you
20 see any inadequacies please let us know. If you see any
21 violations out there or a whistle-blower comes to you, you
22 know, we always want to hear from anybody on that kind of
23 stuff, we always investigate and we spend a lot of money in
24 these investigations. So we'd like to spend more money, I
25 guess, but I would thank you very much for taking the time.

1 MS. EPSTEIN: Thank you. I appreciate the opportunity.
2 Can I ask you, are there whistle-blower protections at the
3 state level for folks industry or are they doing it at their
4 own risk?

5 CHAIR SEAMOUNT: Does anybody know?

6 COMMISSIONER FOERSTER: John would know.

7 COMMISSIONER NORMAN: Yes. We've dealt with this and we
8 have asked people to protect their identity and we have agreed
9 to do that. We have suggested procedures to personnel if they
10 want to work through an attorney or a group they go to that
11 group and they can double-blind it and bring it to us. We have
12 had complaints related to -- alleging at such and such well or
13 pad and so forth. When we've tried to follow back on that
14 we've had people decline to identify it for fear of retaliation
15 in which case then we have suggested to them then give us -- if
16 you're concerned about one give us five and we'll check those
17 five out. And it's -- I'm -- as the public member I am very
18 convinced that we're open, receptive and we can extend
19 protections to any whistle-blower. And it sometimes though is
20 a bit frustrating because -- Commissioner Foerster was the one
21 that said it's a lot like somebody calling the fire department
22 and saying there's a fire in Anchorage and you ask them where
23 and they say well, I can't tell you because. So at some point
24 people have to come forward and obviously if we have to make a
25 case we are going to need witnesses although if our own

1 independent investigation uncovers a violation then that would
2 stand on its own.

3 MS. EPSTEIN: You know, that's helpful, but actually part
4 of the intent of my question was were there job protections,
5 legal protections at the state level. And it sounds like that
6 people can be fearful of retaliation and lose their job and
7 that's.....

8 COMMISSIONER NORMAN: Well.....

9 MS. EPSTEIN:that might limit the number of people
10 that come forward because.....

11 COMMISSIONER NORMAN:that has been expressed to us,
12 but we have tried to tell -- I know of nothing that has
13 occurred within this agency where anyone would ever have to be
14 fearful that their job is going to be in jeopardy. If they
15 want protection we've offered three or four different
16 alternatives including telling them you can come in and talk to
17 us and we will investigate it and your name won't be mentioned.
18 If you're even concerned about further protecting the identity,
19 you can go through an intermediary and relay the information.
20 And if you're concerned that even that information imparted to
21 us might lead back to the job site where you're working, then
22 give us four or five to defuse it. And if you have any further
23 suggestions we're willing to protect any whistle-blower. We
24 look at it as additionalizing years out there and so we -- you
25 know, as long as it's not being abused and to speak frankly as

1 long as it's not part of some labor dispute or something else
2 or some grievance that an employee has with a supervisor. But
3 we're willing to -- I mean, we -- not willing, we do, we take
4 every allegation seriously, once it's submitted to us it's
5 investigated.

6 MS. EPSTEIN: It sounds like under the current frame work
7 you're working under you do everything you can to protect
8 folks, but they're -- without something that the Legislature
9 passes, you know, there may be some people that never even
10 approach you. So it might be good to think about whether it
11 makes sense to get a bill that does protect whistle-blowers at
12 the state level, you know, in terms of not -- job retaliation.

13 COMMISSIONER NORMAN: Okay. Well, our Assistant Attorney
14 General is here.....

15 MS. EPSTEIN: Okay.

16 COMMISSIONER NORMAN:and I know that, you know, that
17 may involve extending immunity and I know the Department of
18 Law, their ears go up whenever they hear that, but we will take
19 that suggestion and we'll pursue it and see.

20 MS. EPSTEIN: My experience at the federal level in the
21 pipe line realm which did not have whistle-blower protections,
22 it wasn't particularly controversial in terms of different
23 parties and it was something that went through pretty smoothly.
24 So.....

25 COMMISSIONER NORMAN: Okay.

1 CHAIR SEAMOUNT: Commissioner Norman, I was assuming that
2 Ms. Epstein was going to find a sponsor for the bill that she
3 was going to recommend and not us.

4 Commissioner Foerster, I think you had something else to
5 say or.....

6 COMMISSIONER FOERSTER: No.

7 CHAIR SEAMOUNT: Oh, okay.

8 MS. EPSTEIN: I'm happy to work with you on that though.

9 CHAIR SEAMOUNT: Okay. Well, thank you very much, Ms.
10 Epstein.

11 MS. EPSTEIN: Thank you.

12 CHAIR SEAMOUNT: Thanks for taking your time and coming
13 in.

14 Okay. Last but not least we have Ms. Kara Moriarty with
15 the Alaska Oil & Gas Association. And she's going to give us
16 some viewpoints from her organization.

17 MS. MORIARTY: I am. And thank you and good afternoon.
18 For the record my name is Kara Moriarty and I'm the Deputy
19 Director of the Alaska Oil & Gas Association, commonly referred
20 to as AOGA. We are the private, nonprofit trade association
21 for the oil and gas industry here in Alaska. And our 15
22 members companies account for the majority of oil and gas
23 activities here in the state.

24 I want to thank you for the opportunity to testify today
25 and bear with you with your patience, we've been here all day

1 and so I will try and keep my comments as concise and direct as
2 I can.

3 As you know AOGA has a task group, a specific task group
4 and several committees that follow issues, but when it comes to
5 AOGCC issues we do have a specific task group that that's all
6 they work on is issues that the AOGCC is concerned with. And
7 I'm very happy to represent our viewpoints today. Our task
8 group is made up of drilling engineers and drilling technicians
9 that have decades of experience working in Alaska. As you know
10 I am not one of those engineers or technicians, but I've been
11 working with this group for six years and so I will do my best
12 to represent our position today. I have submitted AOGA's
13 detailed written comments in response to the 14 questions put
14 forth in the Docket No. OTH-10-16, seeking input on AOGCC's
15 regulations in offshore and extended reach drilling. My oral
16 testimony today will summarize those written comments by
17 discussing the components of current AOGCC regulations and the
18 application for a permit to drill, provide our viewpoint on
19 some of the specific questions that you asked about in the
20 inquiry docket and identify areas for your consideration.

21 To begin let me stress that a focus on prevention using
22 safety and risk management systems and management of change
23 procedures is the most effective way to prevent accidents.
24 Current AOGCC regulations effectively regulate the drilling of
25 offshore and ultra extended reach wells.

1 The process begins in the application for a permit to
2 drill which contains several facets of planning and prevention
3 including detailed information for the proposed drilling fluid
4 program, information on the drilling fluids system and specific
5 information about the equipment planned for use on a given
6 well. So for the record and for the public I'd like to outline
7 several of your current regulations as they do provide that
8 effective framework.

9 First of all AOGCC regulations have specific requirements
10 for -- regulations for providing primary well control. The
11 regulations allow operators to develop sound well practices
12 specific to the circumstances of a particular well and drilling
13 equipment being used. The regulations contain detailed
14 requirements for blowout prevention equipment which I'll refer
15 to, which is a common industry reference, as BOPE, and diverter
16 equipment including the configuration and sizing of the BOPE.
17 The regulations require for testing when the equipment is
18 installed, repaired and changed and periodically thereafter.
19 The AOGCC must be notified to allow witnessing of these tests
20 and the regulations also provide sufficient controls concerning
21 BOPE test frequency and witnessing and follow-up inspections.

22 Regarding inspections for a moment, I just want to stress
23 that the industry welcomes AOGCC inspection and insights to
24 provide a safe drilling environment. The AOGCC is able to
25 conduct inspections at anytime and operators must be able to

1 provide access to the drilling fluid equipment and BOPE to be
2 used at all times. It is important to note that if BOPE
3 components have been used to prevent the flow of fluids from a
4 well the BOPE must be tested before the next wellbore entry.
5 In no case can drilling begin or resume after a failed BOPE
6 test until the equipment is repaired or replaced and a
7 successful test is demonstrated.

8 The AOGCC regulations provide an effective framework to
9 enable operators to select the most appropriate risk assess
10 configuration on a well by well basis. The regulations require
11 periodic testing not just during testing of the BOPE, not just
12 during installation, but also during drilling operations. The
13 regulations require casing strings which have BOPE installed to
14 be pressure tested and to have a formation integrity test
15 during drilling casing shoe or after the drilling casing shoe.
16 The regulations specifically require a cement quality log or
17 another evaluation log in service wells used for injection to
18 demonstrate isolation of the injected fluids and the AOGCC may
19 require a log in cases it believes (indiscernible) isolation
20 may not have been established and also has the ability to
21 require a bond log on a case by case basis.

22 The regulations allow operators to determine the most
23 effective centralization programs that allow for sufficient mud
24 removal during cementing, achieve adequate zonal isolation and
25 allows the cementing companies to verify the displacement

1 efficiency. Because centralization programs will vary greatly
2 on a case by case basis and include multiple factors, including
3 well conditions during the time of installation, prescriptive
4 requirements for centralization are not the preferred approach
5 to proper well design. The regulations also allow operators
6 the ability to assess all potential loading conditions for
7 subsea wells during the design phase of the well planning
8 process to ensure that wellhead, casing and annular seal
9 mechanisms are properly designed to maintain integrity.

10 And finally the regulations provide effective guidance and
11 controls with respect to well casing design by allowing
12 operators to carefully assess risk of using either a single
13 string of intermediate casing or a tie-back to penetrate a
14 hydrocarbon bearing zone before being included in the drilling
15 program.

16 So to mention a couple specific things that you asked
17 about with respect to the third party certifications of BOPE,
18 at the current time all BOPE used in the state of Alaska are
19 located on the surface and are readily accessible for
20 inspection, repair and maintenance. As I mentioned your
21 regulations require regular, periodic testing of BOPE during
22 drilling operations which combined with the maintenance routine
23 performed in accordance with OEM specifications and API
24 guidelines which ensure BOPE is fit for service, there is a not
25 a need for a requirement that we believe at this time to have

1 BOPE third party certified.

2 You also asked about the capability of relief well
3 drilling and concurrent relief well drilling and we've heard a
4 lot about that today. As has been mentioned before an operator
5 can drill an offshore and ultra extended reach well the Alaska
6 Department of Environmental Conservation or ADEC regulations
7 require submission and approval of an oil discharge prevention
8 and contingency plan. This plan must include a response action
9 plan containing a summary of plan methods, equipment, logistics
10 and time frames proposed to be employed to control a well
11 blowout. The full blowout contingency plans must be available
12 to ADEC for inspection at all time. Relief wells are an
13 important part of contingency planning and can be an effective
14 response to a blowout when all intervention methods to regain
15 well control have been exhausted in the original wellbore.
16 Relief well contingency plans are developed as part of broader
17 risk mitigation during the well planning stage and current ADEC
18 requirements effectively provide relief well contingency
19 planning. Requiring the concurrent drilling of a relief well
20 should not be considered on the basis of increased complexity,
21 safety and operational risk. Final decisions and design of an
22 offshore or ultra extended reach relief well program must be
23 customized for the particular well control situation and
24 consider actual well conditions.

25 Finally we've identified a few area the AOGCC may want to

1 consider for further examination. One, while current
2 regulations for BOPE testing frequency are effective, the
3 agency may want to consider a requirement for a low pressure
4 test on BOPE and guidance regarding the amount of time steady
5 pressure to be maintained during the pressure test.

6 Two, the AOGCC may want to reevaluate the requirement to
7 pressure test BOPE on exploration wells every seven days
8 following initial rig up especially on extended reach wells
9 with long trip times. Pressure testing every seven days may
10 actually increase overall risk with impacts to drilling,
11 borehole stability for ultra extended reach drilling wells with
12 long trip times and challenging hydraulics for hole cleaning.
13 Development drilling testing is currently every 14 days.

14 We also think that the AOGCC will need to precisely define
15 the term offshore and ultra extended reach drilling to avoid
16 confusion between the agency and the industry.

17 Four, industry standards are periodically reviewed and
18 updated as we've discussed today and there are references to
19 particular standards that can be updated and elsewhere in the
20 regulations to ensure good practice is followed in all drilling
21 operations. In particular changes to API recommended practice
22 53 and the new API 96, should be reviewed for reference in the
23 regulations. API recommended practice 96 is currently under
24 development to address deep water well design and will be
25 sufficient to provide guidance for deep water well design here

1 in Alaska.

2 Specific well control training, and this is our last
3 recommendation, specific well control training is required by
4 AOGCC regulation, but additional training incorporating more
5 realistic Alaska scenarios, simulation technology, would
6 provide greater operational assurance for Alaskan operators.
7 We are -- as industry we are eager and willing to discuss ways
8 to improve workforce competency and look forward to working
9 with the AOGCC on this training issue.

10 In conclusion we believe the AOGCC regulations effectively
11 regulate the drilling of offshore and ultra extended reach
12 wells and AOGA looks forward to working with your agency on
13 these topics and other issues as they arise in the future.

14 So thank you for the opportunity to testify and I'm happy
15 to try and answer any questions that you may have today.

16 CHAIR SEAMOUNT: Thank you, Ms. Moriarty. Commissioner
17 Foerster.

18 COMMISSIONER FOERSTER: Just a few questions. You -- in
19 your recommendations you say that you do not recommend
20 concurrent drilling, but did you form an opinion or a position
21 on concurrent capability?

22 MS. MORIARTY: Well, and I believe that's question 11, the
23 concurrent capability, Commissioner Foerster. If -- I believe
24 -- and currently we believe that the ADEC plans allow for that
25 ability at this time and.....

1 COMMISSIONER FOERSTER: They don't require it?

2 MS. MORIARTY:the plan must -- the plan that we file
3 with ADEC must include a summary of plan methods, equipment,
4 logistics and time frames. The full blowout plan contingency
5 plan must be made available and we believe that they
6 effectively provide relief well contingency planning. If -- to
7 get into any more specifics I could get back with you at a
8 later time, but.....

9 COMMISSIONER FOERSTER: Okay. And do you have an opinion
10 on DEC's adequacy to evaluate blowout prevention plans even if
11 they don't have any drilling engineers on their staff?

12 MS. MORIARTY: We have briefly talked about that. I don't
13 know that we have a position collectively as AOGA, but first
14 blush we do not see any issues at this time if those -- if that
15 authority was transferred to your agency.

16 COMMISSIONER FOERSTER: Two more questions. You mentioned
17 specific Alaska BOPE training, is that available?

18 MS. MORIARTY: That's something that we want to discuss
19 with you actually. We think -- we have some ideas that we
20 could -- that we think could be employed to make the training
21 more Alaska specific, develop some Alaska scenarios that could
22 be incorporated into the training. There is training programs
23 that exist now that are listed in your regulations, well cap is
24 one of them, but we think that they could be tailored a little
25 bit more to Alaska and we are happy to work with you in

1 developing those scenarios.

2 COMMISSIONER FOERSTER: Excellent. How do you feel about
3 more drills, talking about Alaska specific, how does AOGA
4 representing the industry feel about more drills that represent
5 Alaska scenarios that could happen?

6 MS. MORIARTY: The more the better. I mean, we want to
7 see further oil and gas production in the state of Alaska.

8 COMMISSIONER FOERSTER: You'd be willing to assist us in
9 simulated scenarios for preparedness testing?

10 MS. MORIARTY: Yes.

11 COMMISSIONER FOERSTER: Okay. That's great. I'm going to
12 show unusual restraint and not ask my last question.

13 MS. MORIARTY: Okay.

14 COMMISSIONER FOERSTER: Let the record reflect.

15 CHAIR SEAMOUNT: I'm surprised. Commissioner Norman.

16 COMMISSIONER NORMAN: Thank you. Ms. Moriarty, I'm
17 looking at page 5 and your identification of a need to more
18 precisely define offshore and ultra extended reach drilling.
19 My question relates to offshore -- offshore, as you know, is
20 already defined in our regulations. And so I want to try to
21 understand what the ambiguity is in offshore. I think I might
22 know, but I'd like to hear it from you.

23 MS. MORIARTY: Well, when we were going through the
24 questions and trying to address the questions, Commissioner
25 Norman, we were making some assumptions thinking that that

1 definition of offshore was adequate based -- but frankly
2 especially on the North Slope there are not a lot of offshore
3 wells at this time in state waters and so when we were talking
4 about certain equipment, they don't exist right now, and so as
5 industry evolves we may want to look at that definition to make
6 sure we're all on the same page. So that's about as specific
7 as we talked about internally.

8 COMMISSIONER NORMAN: Okay. And was there any discussion
9 about a well that would have a bottom hole location offshore,
10 but be drilled from onshore and I suppose the reverse would be
11 true if you somehow were to use a platform as your drilling
12 mechanism and come onshore. Was that also what you had in mind
13 in.....

14 MS. MORIARTY: That is part of it. Just because it's not
15 specifically defined in detail about what type of operations we
16 could have or may have, we were making some assumptions as we
17 answered these questions especially not so much -- there is
18 some ambiguity with offshore, but more so with the ultra
19 extended reach wells that we -- that it was -- there was just
20 some uncomfortableness with the engineers about exactly what
21 that may mean.

22 COMMISSIONER NORMAN: Okay. Thank you.

23 CHAIR SEAMOUNT: Thank you, Commissioner Norman. And we
24 would define ultra extended reach drilling if we had
25 regulations specific to ultra extended reach drilling, is that

1 correct, Ms. Moriarty?

2 MS. MORIARTY: That was what we were assuming.

3 CHAIR SEAMOUNT: Okay.

4 MS. MORIARTY: Yeah, that was our assumption.

5 CHAIR SEAMOUNT: I assume we'd do that.

6 MS. MORIARTY: Yeah. I -- yeah.

7 CHAIR SEAMOUNT: I assume that we'd do that. Okay. I
8 have no further questions. Are there any comments from the
9 Commissioners prior to recessing?

10 COMMISSIONER FOERSTER: Yeah. I just want to thank
11 everybody for putting up with a long, sometimes technical day.
12 I appreciate all the information that was shared, I know I've
13 learned a lot and gained a lot from having done this and look
14 forward to more of it tomorrow.

15 CHAIR SEAMOUNT: And speaking of tomorrow, are we going to
16 have to update the agenda?

17 MS. COLOMBIE: I already have.

18 CHAIR SEAMOUNT: Oh, okay. Thank you. You're on the
19 ball, Ms. Colombie.

20 Commissioner Norman do you have any sub-final comments?

21 COMMISSIONER NORMAN: Well, I assume we reconvene tomorrow
22 morning at 9:00 o'clock?

23 CHAIR SEAMOUNT: At 9:00 o'clock. And we are recessed at
24 4:31. Off the record.

25 (Off record - 4:31 p.m.)