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BUREAU OF OCEAN ENERGY MANAGEMENT

Programmatic Environmental Impact Statement

Public Meeting

April 25, 2012; 7:00 p.m.

Doubletree Hotel, Annapolis, Maryland

PANEL MEMBERS:

James Bennett

Meghan Butterworth

Reported by

David Corbin

1 TRANSCRIPT OF PROCEEDINGS

2 JAMES BENNETT: Want to welcome you all to
3 this public hearing on the Programmatic EIS for
4 the geological and geophysical activities in
5 the Mid and South Atlantic. Good evening, and
6 my name is Jim Bennett. I'm the chief of the
7 division of environmental assessment for the
8 Bureau of Ocean Energy Management in Herndon,
9 Virginia, headquartered in Washington D.C.
10 Safety first. You can see the exits out of the
11 room over to my left, to your right. The rest
12 rooms. Ladies room is here and men's room is
13 down the hall. It's going to be a little
14 tougher to get to the men's room, because in
15 addition to the open bar, they now have dinner
16 and it's very, very crowded. Fair warning.
17 Okay. Again, we are the Bureau of Ocean Energy
18 Management. We are a bureau within the United
19 States Department of Interior and we're here to
20 take your comments if you have any on the
21 programmatic EIS. And there is a couple of
22 people I want you to be aware of. We are here
23 to get your comments, but if you have questions
24 or issues you want to discuss, we have subject
25 matters assistance, including Meghan

1 Butterworth up here on the panel. She is a
2 marine biologist with our office. And Brian
3 Jordan, an archeologist with our office. And a
4 couple of people from -- also our public
5 affairs person, Blossom Robertson, who is
6 outside. And a couple people from Continental
7 Shelf Associates, our consultant on this
8 effort. Kim Olsen is deputy project manager.
9 And Robin Sherrick, who is outside at the table.
10 This is the fifth public hearing in a series of
11 eight. We've got two in two Wilmington's
12 tomorrow, in Delaware and in North Carolina.
13 And we finish up at the end of the week in
14 Atlantic City. We have distributed a draft
15 programmatic EIS and we're currently in the 60
16 day comment period. The notice of availability
17 was in the Federal Register on March 30th.
18 And, again, we're here to record and collect
19 your comments. Public input is a very
20 important part of the National Environmental
21 Policy Act, which is the driver behind our
22 preparation of an environmental impact
23 statement. The purpose of the EIS is to assess
24 and advise the decision makers and the public
25 as to the potential environmental impacts of

1 various activities, G&G activities, in this
2 case in the Mid and South Atlantic. And as a
3 part of that analysis, we identify potential
4 mitigating measures that could be to reduce or
5 eliminate the impacts. And at the same time we
6 are providing this information to the public
7 and to our own internal decision makers. This
8 is a graphic of the survey applications that we
9 have here. I believe there are a total of
10 eight. And the darker areas are the areas
11 where the surveys overlap, where there's
12 multiple interests in conducting surveys. This
13 is covering the Mid-Atlantic and the South
14 Atlantic planning areas from the beginning of
15 the outer continental shelf, which is
16 three miles offshore, to the extent of the
17 exclusive economic zone. And it also includes
18 the areas that are beyond the exclusive
19 economic zone but part of the extended
20 continental shelf under the law of the sea
21 treaty for possible future activities. G&G
22 activities include geological physical, or
23 drilling, into the sea floor, including coring,
24 shallow test drilling and deep stratigraphic
25 test. This drilling is not exploratory in the

1 sense it's not part of an exploration plan.
2 That can not occur on the OCS unless a lease is
3 issued, and there is no lease -- no lease sale
4 to occur in the Mid-Atlantic in the current
5 five year program from 2012 to 2017. We also
6 have examined a number of geophysical
7 activities including two and three dimensional
8 seismic, control source, electromagnetic
9 surveys, high resolution geophysical surveys
10 and gravity and magnetic surveys. Impact
11 producing factors. We are looking at routine
12 operations which are part of the activities
13 that we are proposing and where we expect the
14 impacts to occur, as well as accidental events
15 such as oil spills that may result from vessel
16 traffic associated with the G&G survey
17 activities. The environmental resources that
18 we're looking at with particular concern are
19 Benthic communities, fish and fisheries, marine
20 mammals, sea turtles, coastal and marine birds,
21 protected species from the list above and
22 socioeconomic issues, including archeological
23 resources such as shipwrecks from marine
24 protected areas and recreational resources,
25 human resources and land use, and other marine

1 uses such as conflicts with DOD.

2 One of the key features of an
3 environmental impact statement is the
4 identification of alternatives to fulfill the
5 purpose and need. And in this case we have
6 examined three alternatives. The first one
7 includes mitigation such as time area closures
8 for the Northern Right Whales and notices to
9 lessees, similar to those that occur for
10 activities in the Gulf of Mexico. We have a
11 second alternative, alternative B, which is
12 more protective, includes all of the measures
13 in alternative A, as well as closure areas for
14 nesting sea turtles, particularly in central
15 Florida, separation between simultaneous
16 seismic surveys, and the use of required
17 passive acoustic monitor. We also include a
18 third alternative, which is the no-action
19 alternative. The no-action alternative is
20 simply that, we wouldn't take action on the
21 permits that were submitted so they would not
22 be allowed to occur. That does not affect some
23 of the seismic work that is done associated
24 with the renewable energy program for the
25 development of wind farms offshore.

1 This is under alternative A the time area
2 closures that would be included in that if that
3 alternative were selected, and including the
4 Mid-Atlantic seasonal management and the
5 Southeast seasonal management areas. And the
6 Right Whale critical habitat in this area.

7 Alternative B would add a sea turtle
8 seasonal management area down here off of Cape
9 Canaveral, and a closure area as well as
10 additional 20-mile closure zones all along the
11 Mid and South Atlantic coast.

12 This is a closer view of the time area
13 closure for sea turtles off of Cape Canaveral.

14 This is a summary of mitigating measures
15 which I already mentioned all of them. Time
16 area closures, protocols, passive acoustic
17 monitoring, separation between simultaneous
18 survey activities, guidance for vessel strike
19 avoidance, guidance for marine debris. And
20 essentially you'll see, like I mentioned
21 already, alternative B is a little more
22 protective than alternative A and for the most
23 part the mitigating measures don't apply in
24 alternative C.

25 This is a summary of the impacts that are

1 contained, the impact levels that we determined
2 through the process of analysis and have
3 included in the environmental impact statement.
4 They range from negligible to major. Most of
5 them are either negligible or minor as you can
6 see from the chart. These conclusions are
7 reached in accordance with definitions which
8 are provided in the environmental impact
9 statement by a team of subject matter experts,
10 which is the folks that are here tonight, on an
11 analysis of the best -- based on an analysis of
12 the best available information.

13 Consultations. We should note that there
14 are a number of other consultations that are
15 required, most notably Endangered Species Act
16 under section seven and Marine Mammals
17 Protection Act, but also protection of
18 archeological resources under section 106 of
19 the National Historic Preservation Act. We try
20 to conduct these consultations concurrent with
21 the development of the NEPA document and the
22 conclusion of the NEPA process. As you can see
23 here from the project schedule, we are in the
24 public comment period right now. At the close
25 of the comment period, which will be at the end

1 of May, we will revise the final programmatic
2 EIS and then go through the review and approval
3 process to publish the final EIS. The
4 environmental consultations will be occurring
5 at the same time so that we can move to a
6 record of decision anticipated towards the end
7 of the year on what action to take, if any, on
8 the permits that we have applications for.

9 We are here for your comments. If you
10 don't submit comments tonight verbally, you're
11 certainly welcome to submit them either by
12 snail mail or through our web site, which is
13 listed up there. And the address for the snail
14 mail is there at the bottom. Again, we do have
15 the comment period open until May 30th and we
16 welcome your comments. With that, if there are
17 any points of clarification needed, I would be
18 happy to provide them. Otherwise we will go to
19 the formal comments. And we do have one person
20 who has signed up to provide comments. Are
21 there any questions.

22 AUDIENCE: Will this presentation be
23 available online, the Power Point?

24 JAMES BENNETT: The Power Point? We don't
25 have it online. The earliest that we would be

1 able to do that would be next week. But if you
2 give me your card --

3 AUDIENCE: I sent you an e-mail.

4 JAMES BENNETT: That was you?

5 AUDIENCE: Yeah.

6 JAMES BENNETT: You'll probably get it
7 late tonight. Okay. All right. With that, I
8 think we can dispense with all of the detailed
9 rules about presentations. We normally limit
10 it to three minutes, but we certainly don't
11 have a lot of competition and time constraints
12 here. So I'll ask Carol Green to come on up to
13 the microphone and we will record your
14 comments. Thank you. Come up to the
15 microphone.

16 CAROL GREEN: I just -- I guess I should
17 say right off that it worries me having seismic
18 testing --

19 REPORTER: Could I have you speak a little
20 closer to the mic.

21 JAMES BENNETT: Could you state your name.

22 CAROL GREEN: I'm Carol Green and I'm
23 opposed to the oil drilling and seismic testing
24 off the coast. And I've created a Power Point
25 kind of to explain why. The first page is

1 basically What Is the Price For Life, What Is a
2 Life Worth. Dolphins deceased since the BP
3 Horizon oil spill has been 35,700 lives lost.
4 35,700, that's a huge number. American,
5 British, and Canadian Ph.D.s have written a
6 paper, and I've got the people who actually did
7 that on the page there. For each body found on
8 the coast, there is 50 that fall to the sea
9 bottom. For dolphins who do survive, thousands
10 are severely ill and they suffer with lung
11 cancer, liver cancer, anemia, and a multitude
12 of other illnesses which scientists attribute
13 to exposure to oil. On each of these pages I
14 have the sources that have stated these facts.
15 So you can find it at the bottom of the page is
16 the sources. The problem in the gulf has been,
17 and with people in general exposed to oil, is
18 that the immune systems are compromised, both
19 in humans and dolphins. Elements in oil,
20 hydrocarbons, PCBs, carcinogens, they are all
21 highly toxic and cancerous. Dolphins the world
22 over suffer and die from compromised immune
23 systems. There has been 3,000 that just died
24 in the past three months in Peru due to
25 compromised immune systems. These chemicals

1 bio-accumulate up the ocean food web and are
2 especially concentrated in apex predators such
3 as dolphins. Dolphins with compromised immune
4 systems are susceptible to diseases, and I have
5 listed the diseases there, and this is
6 according to Peter Ross of Canada's Institute
7 of Ocean Sciences and a world recognized expert
8 on the impact of toxic chemicals, including oil
9 on marine mammals. Throughout the world
10 dolphins carry brucellosis and other immune
11 system -- and their immune systems easily
12 repeal this virus; in the gulf brucellosis has
13 killed several dolphins because their immune
14 systems are so compromised. Humans and
15 dolphins have similar systems. Like marine and
16 wildlife, human life in the gulf is severely
17 ill. And the sources again are at the bottom.
18 The Nation wrote a very good article. If you
19 want to read that source, it really goes into
20 detail what the people involved are going
21 through now. It's really horrific. I mean
22 thousands are very ill from this. In fact
23 everywhere around the world where there are oil
24 drills the humans, wildlife and marine life
25 that live anywhere near those oil drills are

1 severely ill with autoimmune diseases, such as
2 systemic lupus, sauroderma, connective tissue
3 disease, and many, many cancers at a much
4 higher rate than in places where no oil
5 drilling occurs. There is not one exception to
6 this. The Amazon, Nigeria, Kazakhstan, Alberta
7 Tar Sands, everywhere there is oil people have
8 cancer. People are getting these autoimmune
9 illnesses. Marine mammals. A dolphin's
10 neo-cortex is more highly convoluted than in a
11 human brain. Convolutions are folds in the
12 brain that increase surface size; the larger
13 the surface size the more intelligent. See the
14 picture and -- on the slide. The dolphin brain
15 is to the left, the human brain is to the
16 right. Dolphins can easily read abstract
17 symbols. You can see the video there if you
18 type it in. Although scientists are currently
19 analyzing and understanding their complex
20 sonar, we have not yet been able to totally
21 understand their language, yet they have the
22 ability to learn our language. Dolphins are
23 self aware. When a mirror is placed in front
24 of them they realize that the reflection is of
25 themselves by six months of age. Human infants

1 do not have this ability until after they are
2 two years old. Today's scientists have proven
3 that cetacean brain size is equal to that of
4 man and that in some ways whales and dolphins
5 may be even more intelligent. Bottle nose
6 dolphins have convincingly demonstrated that
7 they use a mirror to investigate their own
8 bodies, showing that they have a sense of self.
9 These findings are consistent with further
10 evidence for self-awareness and self-monitoring
11 in dolphins and related cognitive abilities.
12 In particular a highly elaborated cingulate and
13 insular cortex in cetacean brains are
14 consistent with the idea that animals are
15 highly sophisticated and sensitive and emotion
16 and social emotional sophisticated, not
17 achieved by other animals, including humans.
18 All of the above factors provide cause for
19 concern over the vulnerability of whales and
20 dolphins when placed in stressful situations,
21 including capture, drive hunts and the
22 disruption of social networks. Moreover,
23 conservation measures that do not take into
24 account the psychological complexity of these
25 animals will do little to alleviate suffering

1 on an individual level. Beyond our scientific
2 understanding, our current knowledge of
3 cetacean brains and cognitive abilities demand
4 that we develop a new ethic of respect and
5 coexistence with them. And the study from the
6 people that did the studies on the left in the
7 dark blue. If you can read that. Beyond our
8 scientific understanding -- that's what I just
9 read. And then the most important thing on the
10 next page, this is all basically that same
11 study is what I highlighted in yellow. The
12 selective distribution of VENs, comparable to
13 that of great apes and humans, in many cetacean
14 species is intriguing and consistent with the
15 growing evidence of their sophisticated
16 cognitive abilities and social lifestyles such
17 as complex social structures, higher order
18 alliances, cooperative networks, cultural
19 transmission and tool use. Seismic blasting is
20 a gateway to drilling. Once billions are paid
21 for eight years of blasting, there is no
22 turning back. The seismic study is completely
23 unnecessary when it comes to supporting
24 offshore wind development in Mid-Atlantic
25 states. The necessary G&G studies are already

1 covered by the programmatic environmental
2 assessment that BOEM has already approved for
3 our Mid-Atlantic wind energy areas, which
4 includes both Maryland and Virginia. The
5 airguns repeatedly comb over vast areas of
6 ocean, areas the size of Rhode Island around
7 one single array. The large arrays used by
8 industry can involve more than 30 airguns
9 simultaneously. To search for oil and gas, the
10 industry uses arrays of airguns which release
11 intense blasts of compressed air into the water
12 every ten seconds for days, weeks and months on
13 end. These rapid discharges of compressed air
14 from airgun arrays send acoustic shockwaves
15 down through the water column that is reflected
16 back from sub-sea rock strata. Seismic surveys
17 conducted during offshore oil and gas
18 exploration are up to 260 decibels loud. This
19 causes brain hemorrhaging, injury, extreme
20 pain, hearing loss and/or death to marine
21 mammals located anywhere near the surveying.
22 Marine mammals are especially at risk, as their
23 hearing can be permanently damaged or even
24 eliminated. This is equivalent to a stick of
25 dynamite going off every ten seconds next to a

1 human being for months without ending.
2 According to the Administration's own estimate,
3 seismic exploration would injure up to 138,500
4 marine mammals and disrupt marine mammal
5 feeding, calving, breeding and other vital
6 activities more than 13.5 million times over
7 the course of the proposed eight years of
8 exploration. The noise from seismic surveys
9 has been know to carry up to 100,000 square
10 miles through ocean environments. Airgun noise
11 is loud enough to mask whale calls over
12 thousands of miles, destroying their capacity
13 to communicate and breed. It can drive whales
14 to abandon their habitat and cease foraging,
15 which is finding food. In the gulf there is
16 perpetual oil spills. Elements in oil such as
17 PCB's, benzene and hydrocarbons or
18 carcinogenic, they can cause cancers and
19 illness in life, whether it be human or
20 cetacean, comes in contact with it. Collected
21 2/27/2002, See Foam in the Gulf of Mexico still
22 contains PAH's almost two years after the oil
23 spill. Currently there are literally thousands
24 of abandoned and other wells leaking right now
25 in the Gulf of Mexico, and in a report released

1 by Gulf Coast Waterkeepers it was estimated
2 that over 3,000 oil spills have happened in the
3 past 12 months. That isn't even counting
4 onshore oil spills along the Gulf Coast. The
5 oil industry clearly has an oil spill problem.
6 The problems that led to the BP oil disaster
7 have not been fixed. And there is still oil
8 coming from the deepwater Horizon site. Not a
9 couple drops here and there but a very large
10 swath that covers over 2.5 million square
11 yards. Although the oil industry will
12 always -- as far as revenue and jobs. Although
13 the oil industry will always promise states
14 with new revenue and jobs for letting them reap
15 irreversible havoc on our coastlines, wildlife,
16 marine life and health, this is the current
17 revenue and jobs that are lost by giving them
18 keys to our coastline. Fishing. Commercial
19 and recreational fishing off the Atlantic from
20 Maryland south generate \$11.8 billion annually
21 and support 222,000 jobs. Airgun blasts used
22 for seismic exploration have been shown to
23 displace commercial species on a vast scale.
24 Over thousands of square kilometers the result
25 has been to dramatically depress catch rates of

1 species such as cod, haddock and rockfish.
2 Fisherman in some parts of the world where
3 seismic testing is already occurring are
4 seeking industry compensation for their losses.
5 Whale watching. Green lighting seismic also
6 poses threats to the \$20 million whale watching
7 industry in the Mid to Southeast Atlantic.
8 Coastal tourism. If the Administration takes
9 the next step by opening the coast to oil and
10 gas drilling, the entire \$23 billion coastal
11 tourism and recreational activities are at
12 risk. In Maryland, there are about 20,500
13 fishing jobs, nearly \$770 million in
14 recreational fishing sales, and more than
15 76 million in commercial fishing revenue.
16 Maryland's tourism and recreation industry
17 generates more than \$2.5 billion and nearly
18 60,000 jobs. Offshore drilling off the
19 Atlantic coast could be devastating for it.
20 U.S. drilling does not lower gas prices. A
21 statistical analysis of 36 years of monthly,
22 inflation-adjusted gasoline prices in U.S.
23 domestic oil production by the Associated Press
24 shows no statistical correlation between how
25 much oil comes out of U.S. wells and the price

1 at the pump. When you put the
2 inflation-adjusted price of gas on the same
3 chart as U.S. oil production since 1976, the
4 numbers sometimes go in the same direction,
5 sometimes opposite directions. If drilling for
6 more oil meant lower prices, the lines on the
7 chart would consistently go in opposite
8 directions. A basic statistical measure of
9 correlation found no link between the two, and
10 outside statistical experts confirm those
11 calculations and the third bullet basically
12 tells you what -- who those experts were that
13 basically did the study and acknowledge the
14 study was correct. Drill baby drill has
15 nothing to with it, said Judith Dwarkin, chief
16 energy economist at ITG investment research.
17 Two other energy economists said the same thing
18 and experts in the field have been making that
19 observation for decades. That's because oil is
20 a global commodity and U.S. production has only
21 a tiny influence on supply. Additionally any
22 increase from our wells could be answered by a
23 decrease from OPEC so as to control the cost.
24 The U.S.'s largest export last year was
25 gasoline. So drilling here -- more here does

1 not keep it in our country. In a recent speech
2 Senator Jeff Bingamin also pointed the lack of
3 a relationship between U.S. oil production and
4 gas prices using the chart to the right. Said
5 Senator Jeff Bingamin, "here, the red line is
6 the change in domestic production, year over
7 year. The blue line is gasoline prices. And
8 what's striking about this chart is the lack of
9 relationship between the two lines. Even with
10 U.S. production increasing as it was at some
11 point, oil prices were also increasing and gas
12 prices were also increasing. Sadly, most folks
13 do not realize that drilling for oil in America
14 will not lower gas prices at the pump. So what
15 is the price for a life, what is a life worth.
16 That was my initial question. And my last
17 slide is in my opinion the question is not do
18 we want seismic tests or oil drilling, rather
19 the question is are we willing to murder to
20 obtain that oil. Thank you.

21 JAMES BENNETT: Thank you. I appreciate
22 everyone's indulgence on the time even though
23 we don't have anyone else scheduled to speak.
24 Thank you for those comments. Having said
25 that, has anyone come that would like to --

1 would like to address the panel.

2 AUDIENCE: Any chance we can get a
3 rebuttal from --

4 JAMES BENNETT: No. We're not here for
5 the purpose of rebutting the testimony. We're
6 here to listen. We appreciate that. Anyone.
7 Does anyone else have comments to provide. If
8 not, we will stand in recess for a while.
9 Unless somebody else comes, we will simply
10 adjourn. I appreciate your coming and I want
11 to remind everyone that comments are
12 available -- I mean comments can be made until
13 May 30th. We, again, can receive comments
14 either by snail mail or over the web. Thank
15 you very much for coming. We will stand in
16 recess. Thank you.

17 (Meeting concluded at 7:34 p.m.)

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STATE OF MARYLAND

I, David Corbin, a Notary Public in and for the State of Maryland, do hereby certify that the within named, BOEM PUBLIC MEETING, personally appeared before me at the time and place herein set according to law.

I further certify that the meeting was recorded stenographically by me and then transcribed from my stenographic notes to the within printed matter by means of computer-assisted transcription in a true and accurate manner.

I further certify that the stipulations contained herein were entered into by counsel in my presence.

I further certify that I am not of counsel to any of the parties, not an employee of counsel, nor related to any of the parties, nor in any way interested in the outcome of this action.

AS WITNESS my hand and Notarial Seal this 3rd day of May, 2012, at Centerville, Maryland

David C. Corbin
Notary Public

My commission expires January 6, 2016

**BUREAU OF OCEAN ENERGY MANAGEMENT
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