

1 PUBLIC MEETING

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3 IN RE:)
4 PROPOSED GEOLOGICAL AND)
5 GEOPHYSICAL ACTIVITIES IN THE)
6 MID- AND SOUTH ATLANTIC OCS)
PLANNING AREAS,)
_____)

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8 A Public Meeting, Programmatic Environmental
9 Impact Statement, Proposed Geological and Geophysical
10 Activities in the Mid- and South Atlantic OCS
11 Planning Areas, under the Georgia Civil Practice Act,
12 reported by Elise M. Napier, CCR-2492, in the offices
13 of The Coastal Georgia Center, 305 Fahm Street,
14 Savannah, Georgia, on Wednesday, April 18, 2012,
15 commencing at 7:00 p.m.

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1 APPEARANCES OF THE BUREAU OF OCEAN ENERGY MANAGEMENT

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I N D E X

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PRESENTATION

By Mr. Bjerstedt	4
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(Reporter's disclosure statement attached to back of transcript.)

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E X H I B I T S

(No Exhibits were marked.)

1 MR. BJERSTEDT: Welcome to our evening
2 session for discussion on the proposed geological
3 and geophysical activities in the Mid- and South
4 Atlantic planning areas. This is a public meeting
5 as part of the National Environmental Policy Act
6 procedural steps for different federal government
7 uses to understand the ramifications of big
8 decisions using public resources before they are
9 made. And the purpose for the meeting today is to
10 explain the environmental impact statement, which
11 I'll do, and then to receive your testimony on it
12 or anything in writing that you care to offer that
13 we can use to help revise the document to a final
14 form.

15 This is the public meeting schedule.
16 You can see Savannah is our second venue at a
17 meeting this afternoon, be at these places between
18 now and the end of next week. We distributed a
19 programmatic EIS, two volumes, it's posted on the
20 website and you can see evidence that it actually
21 exists. The notice of availability for the
22 document was published on March 30th in the
23 Federal Register. We have a 60 day comment period
24 that's open now. We're here to collect your
25 comments and make a final revision to the draft.

1 The purpose of an environmental impact statement
2 is to give the decisionmaker a firm technical
3 basis for -- that involves a thorough
4 understanding of what is being proposed and what
5 are the potential impacts for it. The Secretary
6 of Interior will use this environmental impact
7 statement once it's final to make a decision on
8 the proposed action, which is this work, in this
9 large tract of the Atlantic Ocean.

10 The EIS exams the environmental impact
11 of resources in these large areas. We're going to
12 in it discuss the projected levels of activity
13 that we've solicited industry for input and use
14 our own in-house experts within the Bureau of
15 Ocean Energy Management to see what sorts of
16 projected activities is within the South Atlantic
17 area. With that we examine mitigation measures
18 for the kinds of impacts that are caused by these
19 techniques, which I'll go over, and it's meant to
20 provide an analysis of the work and the impacts
21 for federal agencies like ours and for other
22 federal agencies that have roles in environmental
23 law that we have consultations with that also have
24 statutes that they have to follow in protecting
25 the resources they are responsible for.

1 The proposed action, we could see the
2 large tracts that we're talking about both in the
3 maps, on the screens and some of the maps mounted
4 around the room is to authorize geological and
5 geophysical activities in these areas and the
6 three program areas that the Bureau of Ocean
7 Energy Management regulates and manages. These
8 are oil and gas, renewable energy and small
9 program for marine minerals. That would be sand
10 and gravel taken off in federal lands and brought
11 on shore for coastal restorations and such.

12 These activities would be geological in
13 nature, which involves penetration of the soft
14 sediment or the rocks that are below the soft
15 sediment either by directly contacting the
16 sediment or instrumentation is pushed down into
17 the soft sediment. It also involves shallow test
18 drilling. And how shallow is shallow? Generally,
19 less than 500 feet we consider shallow test
20 drilling. Deeper stratigraphic tests are greater
21 than 500 feet. This is not oil and gas
22 exploration. This is more understanding what the
23 conditions and properties are of the ocean bottom
24 in the shallow part of the sediment that's on the
25 bottom.

1 Geophysical techniques can look more
2 deeply by using seismic surveying technology and
3 using airguns to impulse a source of energy that
4 bounces off the sea bottom and also layers
5 underneath the soft sediment and also the deeper
6 geology will come back and you can see it
7 expressed on the computer screens and people that
8 know how to interpret it can understand what's
9 happening in the deep geology.

10 Controlled source electromagnetic
11 surveys, these are techniques used by industry to
12 understand formation fluids and gases that are
13 inside the pores of the rocks and sediments. High
14 resolution surveys, geophysical surveys either are
15 more engineering in nature. Multibeam
16 echosounders, sidescan sonar is a technique that
17 looks at obstructions on the sea bottom or can be
18 used to infer what the sea bottom is like. It
19 could look to see, for example, shipwrecks,
20 obstruction of that nature and also even can be
21 used to determine what sort of animals are living
22 at the bottom, on hard bottoms or the corals and
23 things of that type that live on harder
24 substances. Also gravity and magnetic surveys are
25 generally conducted at the same time that seismic

1 surveying is done also airborne.

2 Impact reducing factors, we had a
3 proposed action, you assess what sorts of
4 stressors are going to be put on the environment
5 by the work that's proposed. You have routine
6 types of impacts and you have accidental types of
7 impacts, things are not protected. With the kind
8 of work that we're talking about the geological
9 research and exploration and the seismic and the
10 high resolution geophysical work, you have sound
11 in the water from airguns and from electrical
12 impulses put into the water column and cause a
13 signal to be generated to bounce off the bottom
14 again.

15 You have aircraft noise, helicopters,
16 some kind of service these boats that are working
17 on the water for long periods of time, surveys can
18 take weeks. It takes even longer that that if
19 there are really large areas that are being
20 surveyed. The services would include grab
21 sampling on the bottom. Anything that's done that
22 touches the bottom or disturbs it in any way is an
23 impacting factor because you have to have
24 something there that could be disturbed and you
25 don't want it disturbed, let's say a shipwreck or

1 protected animals, that would involve drilling and
2 coring and discharges for drilling which would be
3 the cutting of the mud and the mud that's brought
4 up the hole when you do drill. If you place
5 anchors, if you place cables or if you place
6 sensors on the sea bottom, you're going to disturb
7 it, you need to know what's going on there before
8 you disturb it.

9 Onshore base support includes indirect
10 impact of people working on the ocean. Ships have
11 to dock somewhere, they have to be serviced
12 somewhere, they have to buy their supplies from
13 somewhere, the crews have to live somewhere so
14 those are all indirect impacts.

15 Vessel traffic is physical presence of
16 ships moving on the water. You've got noise, you
17 have waste generated at sea, you have safety zones
18 to consider. And then lastly, any work on the
19 ocean involves the potential generation of trash
20 and debris, which you have to remain conscious of.
21 For accidental events we're talking about these
22 surveys and not talking about drilling for oil and
23 gas. We're not talking about producing it or
24 transporting it or tankering it so it's not
25 involving movement of oil, for example. But it

1 does involve boats moving on the water and, you
2 know, you can have an accident and can always get
3 fuel so that's what we're talking about when we're
4 talking about accidents.

5 In our document we have discussions on
6 benthic communities, animals living on bottom,
7 fish and fisheries both commercial and
8 recreational, marine mammals, sea turtles, coastal
9 and marine birds, protected species of any of
10 those I just mentioned.

11 For socioeconomic issues, archaeological
12 resources, shipwrecks, Atlantic Coast has got a
13 long industry, had a lot of shipwrecks on the
14 bottom. Those have to be before you have work
15 that disturbs the body, you notice that from each
16 prospective there includes national marine
17 sanctuaries, there is two of them; the monitor,
18 Mid Atlantic planning area and Gray's Reef, a
19 national green sanctuary in the South Atlantic
20 planning area; human resources land use, as I
21 mentioned; other marine uses include military,
22 uses of the ocean.

23 The Department of Defense has large
24 tracts of the Mid South Atlantic that are used for
25 testing; that are used for technology; technology

1 testing; military applications under the water, on
2 the water and even aircraft can drop things into
3 the water. For proposing to do work out there
4 they have to understand what they're doing and
5 coordinate with them. The hardened soil the EIS
6 is the alternative. They are structured from the
7 proposed -- the purpose of the work and the need
8 for the work you develop alternatives because NEPA
9 requires you to not only take a look at what the
10 proposed action is, but also to bounce it against
11 an alternative that can also fulfill the purpose
12 it needs. So it gives a decisionmaker some degree
13 of variability. It's not just analyzing what you
14 want to do, it's analyzing what you want to do and
15 viable alternatives.

16 In the alternatives we have in our
17 document we have three. They are based on area
18 restrictions and activity restrictions that have
19 been recognized in regulations for NOAA fisheries
20 in these areas for the Northern Right Whales.
21 They have seasonal manage areas and critical
22 habitat that have been recognized by NOAA and they
23 have time area restrictions. They have certain
24 kinds of things happen during certain times of the
25 area because the whales are there. We're taking

1 those and pulling them into our EIS and we're also
2 having an approach that tends to limit activity
3 that can happen in these areas during the same
4 time that NOAA fisheries recognizes them for
5 aerial restriction.

6 We're also proposing to import the
7 practices that we use in the Gulf of Mexico for
8 this kind of activity, this work, this geological
9 surveying and geological coring. We have a series
10 of guidance documents that are used to tell
11 operators the designed elements for these surveys
12 that are designed to show how surveys begin, how
13 they are conducted and under what conditions the
14 survey should terminate. These are practices used
15 in the Gulf. We can use these practices in the
16 Atlantic maybe with some modification usually very
17 slight, but they are part of the proposed action.

18 Aerial restrictions for the areas
19 recognized for whales are occurring and
20 restricting these areas for seismic airguns
21 because they tend to be probably the most
22 important impact -- impacting factor.

23 Alternative B is an amplification of A,
24 if you want to put it simply. It expands on the
25 nature of the mitigations that are being proposed

1 and it also expands the areas that are to be
2 proposed for time area closure. I'll show you a
3 map in a minute. We going to recognize expanded
4 time area closures for the Right Whales and other
5 species that use the same waters.

6 Closure area for nesting sea turtles in
7 Central Florida and separation between
8 simultaneous seismic surveying that may be taking
9 place and also a required use of a technique
10 called passive acoustic monitoring. This is
11 sensitive hydrophones that are in the water that
12 can pick up the tell-tell signs of marine mammals.

13 They make various noises under water,
14 they have feelings and they pick this up with the
15 sensitive instrumentation. And since mammals
16 breathe you don't really see them at the surface.
17 If you use passive acoustic monitoring or Pam, it
18 allows you to get a better idea if they are in the
19 area because if they are under water, you can't
20 see them but if you can hear them, you know they
21 are there.

22 So it's a technique that's relatively
23 new. It's used in other foreign countries. It's
24 not required in the United States to this point,
25 but the technology is getting better and better

1 and perhaps deployed more routinely.

2 Alternative C is required by NEPA
3 evaluation and then EIS, it's an alternative that
4 says we're not going to do this and the way we
5 structure it is since there are no more active
6 leases in the Atlantic and there is no primitive
7 G&G activity taking place there now, we are going
8 to say for that part of our program we won't do
9 it. If we pick the no action alternative C, we
10 won't have this activity online. But renewable
11 energy work and marine mineral to work is
12 currently authorized under law on a case-by-case
13 basis, so we're not seeking to foreclose something
14 that is already allowed, we're seeking to
15 understand whether it's wise to go ahead and begin
16 something that's not currently allowed. So that's
17 how we frame our no action alternative.

18 These are the time area closures and the
19 this area here hatched is recognized by NOAA as
20 critical habitat for the Northern Right Whale. It
21 extends off of the Georgia Coast and has --
22 extends down the Northern Florida Coastline. This
23 area in orange is the seasonal management area
24 recognized by Southeast seasonal management area
25 and the areas in yellow are the Mid Atlantic

1 seasonal management areas with a continuous band
2 out to about 20 miles north of city of Brunswick
3 all the way up to Wilmington and then you see
4 these zones that are recognized off of major
5 estuaries and ports because what these seasonal
6 restrictions are all about for NOAA is to make
7 vessels go even more slowly when whales are in
8 this area.

9 The whales live up in the offshore New
10 England in the summertime and during the course of
11 the year they begin to migrate down the eastern
12 seaboard and they spawn. The Northern Right
13 Whales spawn and calves in this area has their
14 young in the Winter months. So these areas here
15 it's in effect when those whales are migrating
16 through the area, vessels are supposed to go more
17 slowly. What we're saying for our project is that
18 these areas are already recognized for presence of
19 whales so we'll airgun use to not happening during
20 that same period and leaves the closure dates
21 where the whales are recognized.

22 There is a little bit of offset because
23 they are migrating all during the year and during
24 this period of time in the southeast, that's when
25 they're habituating, they are staying there.

1 UNKNOWN PERSON: Is the closure just in
2 the colored area or is it any area outside of
3 that?

4 MR. BJERSTEDT: These are the -- the
5 colored areas are the seasonal management areas
6 recognized by NOAA.

7 UNKNOWN PERSON: Right. So during the
8 seasonal management period let's say when the
9 whales are present in that yellowed area or would
10 there be very few seismic guns going off nearby?

11 MR. BJERSTEDT: There could be. That's
12 the --

13 UNKNOWN PERSON: Out of those areas?

14 MR. BJERSTEDT: Most of the whales are
15 along the shore.

16 UNKNOWN PERSON: Right.

17 MR. BJERSTEDT: The sitings are
18 generally along the shoreline so any permitting
19 can take place our here. If we're saying let's
20 stay away from these areas where whales tends to
21 be concentrated but you can allow work having
22 taking place any time outside of these seasonal
23 closure areas.

24 UNKNOWN PERSON: How close? Is there a
25 distance away from the seasonal management area or

1 right up against it?

2 MR. BJERSTEDT: Right up against it.

3 UNKNOWN PERSON: Right up against it.

4 MR. BJERSTEDT: For B, alternative B
5 what I mentioned to you that the concept of these
6 time area closures are expanded. South of the
7 seasonal management areas, southeast seasonal
8 management area, you have an extension going down
9 to the South Atlantic border and these areas that
10 are between the Mid Atlantic seasonal management
11 areas are filled in. So what we're saying in
12 effect is instead of having a discontinuous
13 closure area from shore out to 20 nautical miles,
14 let's include the entire seaboard in these two
15 large planning areas as time area closures for the
16 periods recognized by NOAA.

17 Also down here there is a next slide
18 that will show you a time area closure for sea
19 turtles that are nesting offshore or onshore and
20 then migrate on to shore during their period when
21 they lay eggs and tend to hatch.

22 This area here is well known turtle
23 habitat, turtle nesting area tens of thousands of
24 nests are recognized. What we're saying is that
25 this area in grey from shore out to about ten

1 miles there are no air guns in that area because
2 turtles are coming to shore. They are younger
3 hatching and then moving offshore, so let's keep
4 seismic surveying and airguns out of that area.

5 UNKNOWN PERSON: But if there is
6 shooting off site airguns outside of that area
7 when those animals or turtles, whales, dolphins,
8 go outside that area and you're shooting off your
9 airguns, you're going to then affect them? Yes?

10 MR. BJERSTEDT: When you realize that
11 there are animals throughout this entire area at
12 all times during the entire area, we're just
13 saying when we have known concentrated periods,
14 periods where they are concentrated, we want to
15 stay away from those areas.

16 UNKNOWN PERSON: Yes, sir. I hear that.
17 But I also hear that when you're doing it, and
18 it's going to effect all those sea life period,
19 when you do shoot off your airguns? It will
20 affect the mammals, the whales, the dolphins, the
21 sea turtles and all the sea life; correct?

22 MR. BJERSTEDT: After I speak I'll have
23 Mr. Will Sloger will talk about the noise in the
24 water issues that we've modelled for the
25 environmental impact statement and we can see what

1 the effect of these tools that cause these noises
2 in the water has on marine mammals so our mission
3 is to try to mitigate permitted activity by -- in
4 the wisest way we can imagine but the permitted --
5 the activity is still taking place.

6 If you look at the EIS you have a chance
7 to take a look at table two, dash, two. In there
8 is a good way to see the rollup of the analysis
9 that we did. On the left hand margin you see all
10 the resources we've looked at, this is kind of an
11 example, all of the impacting factors that we
12 looked at that pertain to those resources, the
13 alternatives, the three that we're talking about
14 here, and then these qualitative descriptors that
15 are called significance criteria that are
16 characterizing the level of impact. These range
17 from negligible to minor all the way through
18 moderate and major. Under no resource that we've
19 looked at is there a major impact for anything.
20 They are either to some degree less than that.

21 This is the kind of table that in a
22 nutshell tells you what it is we've looked at,
23 what we think the impacts are and is there a handy
24 way to lay out the nature of our analysis and what
25 with we've concluded. At the time that the

1 environmental impact statement is done between the
2 draft and the final, we have consultations that
3 are required by law. Now that we have a draft on
4 the streets where we'll begin consultations for
5 Section 7, Endangered Species Act and the Marine
6 Mammal Protection Act, they are done concurrently
7 with our evaluation so that now we have a draft
8 these agencies that are responsible for these laws
9 can see what we are proposing and they can react
10 to it with a biological opinion.

11 For the next steps that happen, we have
12 got a draft on the street for 60 day comment
13 period. After the comments come in from people
14 like yourself and from state and federal agencies,
15 we'll finalize the draft then we'll prepare a
16 summary for management to frame the means by which
17 they can make a decision, try to summarize it for
18 them. Environmental consultations that are taking
19 place here and then after EIS is finalized, what
20 you have is a record of decision which reports in
21 the Federal Register like the results of our
22 analysis are and what we've concluded.

23 I mentioned that the comment period
24 closes on May 30th, so it's open now until then.
25 We can receive oral comments from you here now,

1 for example, or if you can submit something in
2 writing, we have a dedicated e-mail address at
3 GGEIS@boem.gov and you can send your comments in
4 that manner. The documents posted on our regional
5 website and all of the information and materials,
6 the tables outside, they have the website address
7 that you can click up the document. You can
8 download it if you want or if you want to send it
9 in the mail through the postal service, there is a
10 mailing address. That mailing address is also in
11 all of our literature that we have outside.

12 In closing what I want to say is that
13 we've taken more than a year to evaluate this
14 under -- to prepare this environmental impact
15 statement. It was directed -- it was directed to
16 the Department of the Interior by the Congress to
17 do this evaluation. It's not something that's
18 based on the fact that we have permit applications
19 in hand for proposed work on the Mid South
20 Atlantic. The Congress recognizes that. They
21 directed us to do this evaluation and that's what
22 we've done here.

23 Our environmental impact statement
24 follows through on the direction of Congress. It
25 presents date of the practice seismic modelling

1 for noise in the ocean with these instruments so
2 it's kind of complicated. It's tough to digest
3 but what I would ask for you to help us finalize
4 the document is to take a look at it, try to
5 understand the mitigations we're proposing, try to
6 understand why we're proposing them and use your
7 best judgment in offering comments to us that we
8 can use to help make it a better document. If
9 something is unclear, tell us about it and we can
10 do something through the period it's drafted and
11 it's a final.

12 Now, I'd like to introduce to you
13 Mr. William Sloger. He is from CSA International,
14 Inc. That's the contractor that we hired to help
15 us with seismic modelling. He's here to tell you
16 a little bit about how we analysis the impacts in
17 marine mammals, the impacts of noise, recognize
18 the impacts of noise to marine mammals. And so,
19 Will, would you come up, please.

20 MR. SLOGER: Thanks, Tom. As Tom just
21 said, I'll describe for you the assessment process
22 to help determine potential impacts to marine
23 mammals. A previous slide that you saw listed the
24 15 resource areas that we identified as eventually
25 being impacted by these surveys that are discussed

1 in the proposed action, marine mammals simply is
2 one of those 15 groups, resources.

3 The assessment process is a five step
4 process. Here we have listed these steps. The
5 first step is to identify resources within the
6 area of interest and I guess I should because of
7 the area of interest a number of times I should
8 elaborate on that a little bit. These maps that
9 you see show the area of interest, outline the two
10 planning areas off the Atlantic Coast and it's
11 important to note that BOEM jurisdiction is
12 federal waters so federal waters begin at the end
13 of state waters, which is three miles offshore and
14 so that's the area we're looking, of course, sound
15 in the case of my discussion can travel. It
16 doesn't recognize that -- that dividing line and
17 so we do look at impacts within state waters.

18 The next step is to establish criteria
19 to define the significance of impact then follow
20 that and we identify factors that can produce
21 impacts. It is then collected about the proposed
22 action resources and mitigation measures that
23 might be implemented. And, finally, the analysis
24 of impacts is done to help in developing estimates
25 of take, if any.

1 This list is all marine mammals that
2 might occur within the area of interest. Of
3 course, density estimates are a big part of our
4 analysis and so these various species occur in
5 varied numbers. Some hardly at all such as the
6 manatee or the three pinniped species so they are
7 not likely to be affected by the proposed action.

8 In developing impact criteria it's
9 important to look at existing federal laws
10 primarily in the Endangered Species Act and the
11 Marine Mammal Protection Act. The Endangered
12 Species Act, of course, lists animals that are
13 endangered either as threatened or endangered and
14 as Tom mentioned earlier, ESA also has
15 requirements for consultation under Section 7 and
16 BOEM is in consultation with the National Marine
17 Fishery Service and will be submitting a
18 biological assessment to satisfy Section 7,
19 consultation requirements.

20 I should also point out that individual
21 operators will have to apply for incidental take
22 authorizations for their specific survey, so while
23 this PEIS analyzes impacts, it's kind of an
24 umbrella document for future environmental
25 documents that will also have to be done for

1 specific surveys.

2 These are the seven species listed under
3 the Endangered Species Act I think perhaps most
4 notably and Tom has already talked about it is
5 Northern Right Whale as far as impacts or really
6 more so as far as mitigation measures to address
7 the Right Whale.

8 Getting back to defining criteria, the
9 Marine Mammal Protection Act provides definitions
10 for level A an level B harassment and, as you can
11 see, they are quite comprehensive in what's
12 covered and what's determined to be harassment
13 particularly with regard to level B. For this
14 analysis four levels of impact were defined and in
15 defining these number of parameters were evaluated
16 to help us determine the levels of impact and
17 these parameters were detectability. That is is
18 an impact measurable or detectable. Duration is a
19 short or long term spatial extent widespread or
20 very small in area coverage and also severity.

21 Tom also listed had a slide earlier that
22 listed impact producing factors. These five
23 factors that are listed here were determined to be
24 the five that would potentially impact marine
25 mammals. Of these five all but the first has

1 either negligible or minor impact on marine
2 mammals.

3 The assessment method involves three
4 basic steps. The first is collection of
5 information; secondly, establishment of mitigation
6 measures and then finally the analysis to
7 determine potential impacts. Part of the process
8 was to define the sound sources and so what we've
9 listed here are the two generally categories of
10 sound sources: Seismic and electromechanical.
11 Within those we developed a list of six sound
12 sources that would cover all potential survey
13 equipment used. Two sizes of airgun array and
14 then the four electromechanical sources that you
15 see there.

16 Surveys I guess are perhaps best
17 measured as far as amount of survey in line
18 kilometers and this table lists the surveys that
19 are anticipated to occur over the time period
20 analyzed, 2012 to 2020. These are all seismic
21 surveys and, as you can see, the lines share as
22 far as line are two D seismic surveys.

23 This figure I think perhaps better
24 conveys the information of previous slide, these,
25 this area of interest and this shows where two of

1 these surveys might occur. The darker areas are
2 areas where the greatest level of survey effort
3 would occur. One of the things that we also did
4 in gathering information was to -- to develop
5 information regarding capabilities in marine
6 mammals, the frequency ranges in which they hear,
7 the acoustic thresholds. We also looked at for
8 analysis purposes the impact thresholds that are
9 established for defining impact. Of course, there
10 is the NIMS approach and the pressure level and
11 then we also analyzed for the approach proposed by
12 South Hall, et.al.

13 This lists the some of the things that
14 were done in modelling the inputs into the
15 modelling and, as I mentioned, six acoustic sound
16 sources were used to define the area of interest
17 we chose 22 modelling sites and those sites were
18 chosen to best represent physical parameters,
19 water depth, bottom composition, water
20 temperature, which greatly improves sound speed
21 profiles. As a result 35 propagation scenarios
22 were developed combining the sound sources and we
23 ended up with 105 different acoustic field
24 estimates. This is just an intermediate product
25 of the process. These are sound pressure levels

1 at two different points, one on the continental
2 slope and one on the continental shelf for both
3 the large and small airgun arrays.

4 To do the analysis the acoustic impact
5 model took a lot of factors into account. What it
6 ultimately does is create a virtual environment
7 within which sound sources in animals are placed.
8 It models sound source properties and the
9 movements dry from the acoustic propagation model.
10 It also takes into account species distribution
11 and dive and swim patterns and also environmental
12 conditions that I previously mentioned. It also
13 takes into account certain mitigation measures.

14 One thing that it's important to note
15 regarding the implementation of mitigation is that
16 the A model does not incorporate all mitigation
17 measures and that resulted -- it's a bit
18 conservative in its results. For instance, it
19 doesn't include any preactivity surveys by marine
20 mammal specie observers, it does not take into
21 account the ramp up procedures used in starting up
22 equipment or shutdown measures. And also does not
23 take into account fully the hearing range of some
24 species, so, as I say, it's a bit conservative as
25 a result.

1 You saw a slide earlier that looks much
2 like this. This lists mitigation measures
3 relative to the three alternatives. Of course,
4 alternative A is the proposed action; B is very
5 similar to the proposed action and perhaps that's
6 where the greatest difference lies in what you see
7 here, for instance, as Tom mentioned, the time
8 area closures are expanded from A to B. The
9 passive acoustic monitoring is only recommended in
10 A but is required in B and then, of course,
11 alternative C is the no action.

12 You saw this figure before. Again, it
13 shows the areas closed and the times they are
14 closed along the Coast primarily to address
15 various seasonal management areas and critical
16 habitat for the Right Whale. In the slide you saw
17 earlier, too, showing the expansion both to the
18 north and south for white whale areas as well as
19 the area to the south to take into account the
20 heavy turtle nesting area off the coast of
21 Florida.

22 Finally, we have here the impact
23 producing factors that could effect marine mammals
24 relative to the three alternatives. As you can
25 see, with the exception of the sound sources all

1 are negligible or minor nature.

2 And that concludes what I have to say.

3 I guess this brings us back to what you're all
4 here for, is to provide comments.

5 MR. BJERSTEDT: Those folks that showed
6 up and made an appointment to speak, Beverly
7 Hollingsworth.

8 MS. HOLLINGSWORTH: Thank you, sir. I'd
9 like to say first, can you hear me now? Good.
10 I'd like to say thank you for allowing me to
11 speak. I really appreciate it. My name is
12 Beverly Hollingsworth. I have a lot of questions.
13 Unfortunately, I'm worried I won't be able to get
14 it all in in three minutes maximum. I'm hoping
15 you'll allow me to talk a little bit longer. I'm
16 hoping you'll allow me to talk a little bit so I
17 can get out all this stuff. Well, first of all,
18 so you're here because you want drill oil off of
19 our coast; correct?

20 MR. BJERSTEDT: Ma'am, we're here to
21 talk about the environmental impact statement --

22 MS. HOLLINGSWORTH: Right.

23 MR. BJERSTEDT: -- as opposed to having
24 a debate about whether or not the area will be
25 open for leasing at some point in the future. All

1 we're talking about all these activities that will
2 be used to do what they are described to do.

3 MS. HOLLINGSWORTH: Right. Okay. So
4 how many years do you think until you have all the
5 oil used up here on our Coast? Do y'all have an
6 estimate of how long it will last, the drilling of
7 oil here? No?

8 MR. BJERSTEDT: Again, that really isn't
9 within the scope of the document that we're trying
10 to propose action that we're trying to --

11 MS. HOLLINGSWORTH: The environmental
12 impact. Okay. So the whales don't know
13 boundaries so how can you control where they swim?
14 And also, as I mentioned earlier, I would like to
15 know how, you know, when you do shoot off these
16 seismic airguns, do they harm the animals at all?
17 Yes they do; correct? And so because I came to
18 your meeting two years ago and spoke when you were
19 here and actually this Friday marks the two year
20 anniversary of the --

21 MR. GOEKE: May I make a statement,
22 please?

23 MS. HOLLINGSWORTH: Yes, sir.

24 MR. GOEKE: Okay. We have, as an
25 agency, we have put together a proposal, a

1 proposed action, which is reflected in this
2 document. What we're trying to do tonight is to
3 get comments on the document. If you have
4 comments on the document, that's really what we're
5 trying to accomplish right now. If you want to
6 have a broader discussion off the topic, we'll sit
7 an talk with you once we finish this discussion
8 but we want to keep this -- we're building an
9 administrative record. We're building a legal
10 document that talks about how we built this
11 document so we'd like to keep to this document
12 right now. If you want to talk about these other
13 documents, afterwards we'll be glad to do that.

14 MS. HOLLINGSWORTH: But I've never seen
15 that document so how can I speak on it?

16 MR. GOEKE: This is the environmental
17 document that we published and mailed out to
18 everybody who indicated an interest and we're
19 trying to get comments on tonight.

20 MS. HOLLINGSWORTH: I just heard about
21 this few days ago. It hasn't been well advertised
22 in Savannah and we weren't aware that you were
23 coming for this.

24 MR. GOEKE: Well, what we'd like to do,
25 again, is to get comments on this. Anything off

1 topic -- you obviously have a lot of questions.
2 We can talk with you about those but we're asking
3 to keep the topic to this right now.

4 MS. HOLLINGSWORTH: Okay. Well, the
5 topic you would like to know -- you're talking
6 about environmental impact from doing something
7 like this, what the environmental impact could do?

8 MR. GOEKE: We're talking -- yes, ma'am.
9 We're talking about the environmental impacts that
10 we've assessed in this document.

11 MS. HOLLINGSWORTH: In this document.
12 Well, 22 years later from the Valdez oil spill
13 we're still having problems. All the people that
14 cleaned up that oil are dead. Their average life
15 span was 51 years. I brought pictures of stuff
16 that's still coming out. The dolphins on the Gulf
17 are being born without eyes. I brought pictures
18 to share with people --

19 MR. GOEKE: I understand.

20 MS. HOLLINGSWORTH: Of dolphins being
21 born without eyes.

22 MR. GOEKE: I understand that you have a
23 lot of information that you'd like to --

24 MS. HOLLINGSWORTH: I brought
25 pictures --

1 MR. GOEKE: We will look at it but we
2 would like to talk about this proposal that we
3 have on the table and this is what we're
4 discussing tonight.

5 MS. HOLLINGSWORTH: Well, if you come
6 here and drill off our Coast, this is what is
7 going to happen.

8 MR. GOEKE: This is no proposal to drill
9 off the Coast.

10 MS. HOLLINGSWORTH: Okay. I hope
11 everybody -- would anybody else like to see any of
12 these pictures? Okay. Well, I'm at a loss here
13 because I did a lot of research on all of this.

14 MR. GOEKE: Yes, ma'am.

15 MS. HOLLINGSWORTH: And my assumption is
16 that you're here ideally because you do want to
17 drill off of our Coast.

18 MR. GOEKE: Our department --

19 MS. HOLLINGSWORTH: And you're trying to
20 get an environmental impact on what that would do
21 and it would be horrible. And I don't even
22 understand why we would spend our money on
23 nonclean renewable resources, our hard earned tax
24 dollars that's going to be spent. It's being
25 spent on something that is not going to serve our

1 country and so we need to be putting our money,
2 our hard earned tax collars into clean renewable
3 resources. If we looked at unclean renewable
4 resources -- not renewable, but unclean resources
5 that we've been using, oil, gas, petroleum, coal,
6 all of these are not clean renewable resources.

7 We --

8 MR. GOEKE: Yes, ma'am. We understand
9 that but we are not proposing to have any drilling
10 or any oil and gas. That's not what we're talking
11 about. We're talking about collecting data
12 offshore. That's all we're talking about.

13 MS. HOLLINGSWORTH: But why are you
14 using -- you're collecting data by shooting off
15 your sizematic, or whatever you call it, airgun.

16 MR. GOEKE: That's what we're writing
17 our analysis on.

18 MS. HOLLINGSWORTH: Right. Okay. Well,
19 two years ago when you were here, it clearly said
20 that it was harmful to the mammals and that the
21 way weren't going to do it was you were going to
22 listen and when you didn't hear any animals or
23 whales or dolphins talking, then you would shoot
24 it off. This is what y'all said when y'all were
25 here two years ago and I'm sure that was recorded

1 all of that documentation, since -- you know, and
2 so if it is harmful, I mean, that's pretty clear.
3 How can you know? Just because, you know, you
4 listen for the sound and you expect us to believe
5 you?

6 MR. GOEKE: Do you have comments on this
7 specific document?

8 MS. HOLLINGSWORTH: I don't know what's
9 in that document because I've never seen it, sir,
10 so I really don't know.

11 MR. BJERSTEDT: It's been available
12 since March 30th and it's been web posted and
13 anybody who signed up in previous meetings to
14 receive our information has received it already.

15 MS. HOLLINGSWORTH: I was at your
16 meeting two years ago and I didn't receive it and
17 I signed all the paperwork with my information,
18 so.

19 MR. BJERSTEDT: If you gave us your
20 e-mail address at that time, we would have already
21 notified where you could find this document.

22 MS. HOLLINGSWORTH: Okay. I --

23 MR. GOEKE: Don't go off. We'll talk
24 with you after we collect comments on this
25 document.

1 MS. HOLLINGSWORTH: Okay. Well, I want
2 to speak with everybody here, not just with you.

3 MR. GOEKE: Well, then what we need to
4 speak about is this document that we have a
5 proposal on and that we've written an
6 environmental document on. This is what we're
7 talking about tonight.

8 MS. HOLLINGSWORTH: Okay. Well, I'll
9 sit down and let somebody else take the floor
10 then. I'm at a loss.

11 MR. BJERSTEDT: Karen Grainey.

12 MS. GRAINEY: G-r-a-i-n-e-y. I'm here
13 on behalf of two organizations: The Center for
14 Stateable Coast and the Southern Environmental Law
15 Firm. Unfortunately, no one from those
16 organizations could be here tonight and they sent
17 me a lot of comments to talk about but since it's
18 a small group here tonight and, of course, both of
19 those organizations will be sending more detailed
20 comments in writing, but I guess they felt like
21 someone should come to the hearing and so I'm here
22 to let you know that both of those organizations
23 disagree with the proposed alternative A and
24 that's the best alternative and I think that
25 Alternative C, which is not doing the seismic

1 surveys for oil and gas, well, gas exploration, we
2 think should be taken off the table and we should
3 just stick with alternative C doing nothing. In
4 fact -- and we're a little bit -- we're not quite
5 sure why you would choose alternative A over
6 alternative B either.

7 It seems to me this type of activity has
8 a huge environmental footprint and the benefits of
9 doing what the surveys is doubtful and given that
10 there is -- the benefits do not outweigh the --
11 sorry, the benefits do not outweigh the
12 environmental impacts, which we think are a bit
13 more severe than this report gives. We feel it's
14 a bit dismissive of the environment impacts to
15 mammals especially but also to commercial
16 fisheries.

17 But I don't want to -- I mean, the three
18 minutes you really couldn't go into all the
19 details. It's a very long statement but we'll
20 submit more comments in writing.

21 MR. BJERSTEDT: Thank you. There is no
22 one else that's signed up. Since it's a small
23 group, ma'am, if you would like to say something
24 come up and state your name and please spell it so
25 the court reporter can get the information down.

1 MS. GROSS: Hi. My name is Ellen Gross,
2 G-r-o-s-s. This is by the directive of Congress
3 and the Department of the Interior to do these
4 assessments; is that correct?

5 MR. BJERSTEDT: Our agency regulates and
6 manages those three program areas that I
7 mentioned: Oil and gas, renewable energy and
8 marine mammals.

9 MS. GROSS: Yes. But I think you said
10 earlier that this entire thing was initiated by
11 the directive of Congress through the Department
12 of the Interior; is that correct?

13 MR. BJERSTEDT: The Congress directed
14 our agency to conduct this environmental
15 valuation.

16 MS. GROSS: Uh-huh. And why was that?

17 MR. GOEKE: You are asking us to read
18 Congress' mind.

19 MS. GROSS: No. But I'm sure this was
20 done after the Gulf oil spill or just in general
21 in case in the future you wanted to --

22 MR. GOEKE: It's predated.

23 MS. GROSS: I can't hear you.

24 MR. GOEKE: It predated. The decision
25 to do this document predated the deep water

1 horizon.

2 MS. GROSS: And who were the people
3 who -- I mean, who actually are the leases going
4 to for these?

5 MR. GOEKE: There are no leases.

6 MS. GROSS: There are no leases?

7 MR. GOEKE: No.

8 MS. GROSS: Okay. Thank you.

9 MR. BJERSTEDT: Anyone else? With that,
10 I will close the meeting. If there are folks that
11 have question for us, we're be going to be around
12 for a little while. You can come up and talk to
13 us, if you would like, outside, but the purpose
14 for this hearing are over now.

15 (The presentation concluded at 7:52
16 p.m.)

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1 CERTIFICATE

2 GEORGIA:

3 CHATHAM COUNTY:

4 I, Elise M. Napier, Certified Court Reporter
5 for the State of Georgia, do hereby certify:

6 That the foregoing deposition was taken
7 before me on the date and at the time and location
8 stated on Page 1 of this transcript; that the witness
9 was duly sworn to testify to the truth, the whole
10 truth and nothing but the truth; that the testimony
11 of the witness and all objections made at the time of
12 the examination were recorded stenographically by me
13 and were thereafter transcribed by computer-aided
14 transcription; that the foregoing deposition, as
15 typed, is a true, accurate and complete record of the
16 testimony of the witness and of all objections made
17 at the time of the examination.

18 I further certify that I am neither related
19 to nor counsel for any party to the cause pending or
20 interested in the events thereof.

21 Witness my hand, I have hereunto affixed my
22 official seal this 3rd day of May 2012, at Savannah,
23 Chatham County, Georgia.

24

25

ELISE M. NAPIER CCR-2492

1 D I S C L O S U R E

2

3 Pursuant to Article 8.B. of the Rules and
4 Regulations of the Board of Court Reporting of the
5 Judicial Council of Georgia, I make the following
6 disclosure:

7 I am a Georgia Certified Court Reporter. I
8 was contacted by my office of McKee Court Reporting,
9 Inc. to provide court reporting services for this
10 deposition.

11 I will not be taking this deposition under
12 any contract that is prohibited by O.C.G.A.
13 15-14-37(a) and (b).

14 I have no contract/agreement to provide
15 reporting services with any party to the case, any
16 counsel in the case or any reporter or reporting
17 agency from whom a referral might have been made to
18 cover the deposition.

19 I will charge its usual and customary rates
20 to all parties in the case, and a financial discount
21 will not be given to any party to this litigation.

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ELISE M. NAPIER CCR-2492

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