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GULF OF MEXICO OCS REGION

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SPEAKER INDEX

PROCEEDINGS

MR. GOEKE: We're going to go ahead and go on the record. Thanks, everyone, for coming. My name is Gary D. Goeke. I'm the Chief of the Regional Assessment section with the Bureau of Ocean Energy Management in New Orleans. The agency is one of the agencies that has responsibilities on the outer continental shelf. We write large environmental documents.

Tom is the EIS coordinator, a NEPA coordinator, for one of the large documents that we do and what we're here to talk about this afternoon is his document.

One of the things that I want to make sure that we all understand is, the topic that we're meeting on this afternoon has a lot of interest. There is a lot of different people suggesting that there are a lot of different things that we're trying to do.

We have a specific proposal incorporated into our environmental document. That really is all we're here to talk about today. The purpose of this meeting is for us to receive comments from folks like yourselves who have looked at our

document and can give us some feedback. That's really all we want to talk about this afternoon.

There are a lot of other questions that will come up. And what we have been doing to everybody and what we've asked is that you keep the questions -- when you get up, when you get a chance to give your comments, keep the questions, keep the statements focused on the topic at hand. If you have other broader questions, if you have other issues that you'd like to discuss, we'll discuss them off line.

We have a court reporter here with us this afternoon who is keeping a verbatim transcript of what we're speaking about. The purpose of this is that we're creating a legal background. We're creating an administrative record that, if we were to be sued or something like that, we go to court, and the administrative records are something that we want to keep clean, keep to the topic. So if you have other broad general questions about almost anything else, we'll be more than willing to sit with you and chat about them and give you answers afterwards.

With that being said, let me introduce Tom Beirstadt. Dr. Tom Beirstadt is a

professional geologist working with our agency and has been doing National Environmental Policy Act work, NEPA work, for quite a few years. And Tom's going to run this session.

E. BEIRSTADT: Thank you, Gary. As I've mentioned, I'm Tom Beirstadt. I was the NEPA coordinator for this environmental evaluation, but I was also the contractoring officer representative for the contract that the Department of the Interior acquired for the technical work that went into the evaluation itself, while we hired CSA International, Incorporated of Stewart, Florida to help us with the underwater sound modeling for this evaluation. What I'll do is I'll give a presentation to talk about what this document is all about. And then after me, Mr. Will Slogar from that company, CSA International, Inc., will come up and talk to you a little bit about the approach we took for modeling sound in the ocean.

We're here today for the Programmatic Environmental Impact Statement. I might lapse at some point into acronyms. It's sort of hard to avoid when you work for the federal government.

But geological and geophysical activities

are often referred to as G&G. And the area that we're talking about is on these easel maps that you can see in the corners of the room in the back. And I'll show you a more detailed map in a bit.

This is a public meeting scheduled for all of the interactions we'll be having for this draft of the environmental impact statement. This is the third venue, as you can see here. Before the end of next week we have got several more places to visit to talk about what we've done here and also to receive the comments from folks like yourselves.

The Congress directed the Department of the Interior to conduct this evaluation and appropriation language that accompanied the 2010 Authorization for the Department of the Interior. It specifically told us to go and do this evaluation in this area. And what we've done here is the evidence of the execution of that directive from Congress.

On the corner of the table there, you'll see that we do have objective evidence that we have done. There are two large volumes sitting there of which you can access on the Web, all the

public information. The material outside shows you where you can get it on the Web.

The notice of availability for this document was published on March 30th and it began a 60-day comment period, which we are sort of right in the middle of right now. We're here today to record or collect your comments on it.

This is an Environmental Impact Statement, and by its nature it's the federal government's transparency for large -- for decisions that it makes regarding public resources.

EIS is the step required by NEPA, National Environmental Policy Act, before the government makes decisions, to think about it first, and also to have people like yourself react to them before they are final.

The purpose of the EIS is to evaluate and assess the potential environmental impacts of these geological and geophysical techniques in the large planning areas that are designated on the outer continental shelf, in this case, the Mid- and South Atlantic, OCS.

We will talk about our -- in the document you'll see a projection of activity levels for

work. They're related to the G&G work that we're talking about here. We present evaluation of mitigation measures for this work to reduce or eliminate impacts on the resources that are there. And, ultimately, we're looking to provide information and analysis of impacts for our Bureau, The Department of the Interior, and other agencies having responsibilities under Environmental Law before decisions to authorize this work are made.

The proposed action is part of our environmental impact statement. That's what's at issue. And it's to conduct the geological and geophysical work for the three program areas that the Department, our bureau, manages: oil and gas, renewable energy and marine minerals.

On the map here, the Mid-Atlantic area shown here, there is a very large tract of land south in the Atlantic planning area here. What this line represents is the exclusive economic zone for the United States. All waters and sea bed in shore of that line are territory of the United States. It extends out 200 nautical miles.

This line, which may be a little bit

harder to see, shows a 350 nautical mile limit, which at the end of it is the outer continental shelf. That is a boundary that's recognized by the United Nation Conference on Law of the Sea, which established the exclusive economic zone by treaties that we've signed and worked through the U.N. over the years.

This area between 200 and 350 nautical miles is available for potential claim by the United States if it can show certain conditions. If the United States at some point pursues adding that zone into our exclusive economic zone, we wanted EIS to have considered this area as part of our evaluation. I don't know exactly if or when the United States will pursue this, but we wanted to include it in case that contingency came up.

The types of activity at issue here, geological and geophysical, is primarily testing. For the geological, we include coring of the sea bed. Shallow test drilling can be done, and that is generally defined as less than 500 feet below the mud-line. And deep stratigraphic tests are also available for people who wanted to do them. They are called COST Test, Continental Off-shore Stratigraphic Test, that can be deep or they can

be shallow, but they're generally greater than 500 feet.

They are not exploration wells. They are exploratory in nature, but if anything is discovered, it can't be produced because there is no lease holder.

The geophysical work I would be speaking of here are two- to three-dimensional seismic surveying. Techniques such as controlled source electromagnetic surveys is a technique the industry uses to evaluate the contents of formation -- for floor space formation of gases and fluids that might be there.

Also high-resolution geophysical surveys. These are primarily geo-engineering in nature, the source of work that is carried out before you build something that's founded in the sea bed. These consist of things such as multi-beam echosounders. They are used to establish depthemetery. Side-scan sonar is used to look at obstructions on the sea bottom. It can also be used to determine what sorts of bottom condition there might be, if there is live bottoms with corals and other animals there.

Boomers is a term that's -- it's not an

airgun-type of tool. It's an electro-mechanical one that involves discharge of electricity and it's reaction of a diaphragm of metal that causes a sound pulse into the water. That's what is bouncing off the sea bed. It's not an airgun-type of technology. It's a bit more benign.

Also, gravity and magnetic surveys, both on the sea, that are typically conducted when seismic surveying is done, but also on airborne surveys, we also permit those.

In an evaluation such as this, we assess what the impact-producing factors are. That's sorted of a neat term of art for what is stressing our environment. And you have things you can predict and things you can't predict.

Routine operations are those things that are inherent in the tools and work that your planning on doing. And accidental events are things, of course, that are accidents.

For routine operations, the EIS considered active acoustic sound sources, that would be both airguns and also the electric mechanical sound sources I just mentioned. Aircraft traffic and noise for perhaps helicopters, service, large ships that are doing

seismic surveys. They often bring crew changes and other supplies.

Drilling and coring would also involve operational waste consisting of the cuttings that are brought up from the well bores that would be drilled either typically discharged into the sea bottom or at the sea bottom. Sometimes there are various chemicals that are used to lubricate and condition the well.

Sea floor disturbances would include anything that touches the bottom. Bottom sampling would actually collect pieces from the bottom. Drilling, coring including the discharges, of course, that touch the bottom. Placement of anchors, cables and sensors, some types of seismic surveys and all placement of instrumentation on the sea bed.

On shore base support services: When you have people working on the ocean, you have shore-base supports that are a part of that, indirectly. You have ships in need of a place to berth. You have suppliers that need to provide supplies and materials for the ships off shore. We have people that work on the ships at that live on shore somewhere.

Vessel traffic, the noise presence of the vessels, exclusion zones for safety or for protected species that might be under observation. Also, anytime ships are at sea, there are wastes that are generated. And trash and debris are also a consequence of any work on the ocean. That is always something that has to be considered.

As far as accident events go, we're talking about fuel spills really, in case of an accident at sea, a collision or some other mishap. Since the proposed action is only for the geological and geophysical work, we're not talking about exploration of wells. We're not talking about production. We're not talking pipe lines. We're not talking about tankers. We're not talking about moving oil. We're talking about work on the ocean for seismic kinds of surveying.

Once you have taken a look at what is stressing the environment by what you are proposing, you need to know what's in the area that could be affected. And those are the affected environmental resources, physical biological and socioeconomic.

These are the environmental resources we have looked at in the communities: Fish and

fisheries, both commercial and recreational, the essential fish habitat, which is the conditions under which healthy and vibrant commercial and recreational fisheries, what they require, in order to sustain themselves; marine mammals, of course, sea turtles and coastal and marine birds, protected species from any of these categories.

And socioeconomic issues as well. The Atlantic seaboard, like I said, has a long history of human activity on it. There are lot of shipwrecks out there.

Marine protected areas, they include two in the planning areas that we're talking about: in the Mid-Atlantic planning area, the Monitor National Marine Sanctuary; and in the South Atlantic we have the Raised Reef National Marine Sanctuary. Those are the special places that have been designated by law.

Recreational resources, human resources and land use and other marine uses that would be conducted at the same time, just sort of while work is done. For example, along the Atlantic there is a large range complex for the Department of Defense that does all manner of underwater testing, service exercises, airborne exercises

where things are dropped in the water. And these are large tracts that are all along the Mid- and South Atlantic planning areas. We have maps and documents to show them.

The heart and soul of EIS is the alternatives you structure to evaluate the work. NEPA requires not only what you prepared but a reasonable alternatives to how you can conduct that work to give a decision maker a range of variation for choosing how they might want to approve it.

For our EIS, we have three alternatives that we have constructed. And they are fundamentally based on existing regulations that have designated activity restriction in certain parts of the OCS for certain periods of time by National Oceanic Atmospheric Administration for protection of the Northern Right Whale. We have taken those areas and said: Okay; let's use these seasonal management areas as a basis to either restrict some of our activity during the periods of time where NOLA recognizes vessel speed restrictions. And that's part of the structure of the alternative, is to recognize what current regulations are recognizing, and then also to look

at what we might be able to do in addition to that.

Also as a part of Alternative A, in the Gulf of Mexico, there is a long history of geologic and geophysical activity. We have a lot of mitigation measures that have been designed over time to help protect the resources at that basin.

They are in existence for what we call notices to lessees, people who are holding leases. It's an explanation of our regulations and details that the regulation itself might not be appropriate because there's too much information. So we tend to have NTL to help us explain what we're expecting of industry as they go about their work out there.

We have our controls for species protection, observers observing activity out there for ramp-up of airguns when the surveys is about to begin. We have special vessel strike avoidance, meaning people are on board watching for animals. Also marine trash and debris awareness.

For Alternative B, part of our philosophy was, was to take Alternative A and try to enhance

or add to what we have already identified. And in the case of these areas in the Atlantic ocean, we have considered an expanded marine time area closures for activity in these seasonal management areas.

We've also looked at closure area for nesting of sea turtles off of central Florida, Brevard County. And as part of B, the separation between simultaneous surveys that might be taking place. And also a requirement for this alternative, a technique called passive acoustic monitoring, often referred to as PAM, as a technique whereby sensitive hydrophones are deployed in the water and technicians listen for sounds that marine mammals make. Because if they're on the surface you can see them; if they are under water, you can't see them but you might be able to hear them. So this is a technique designed to attempt to hear them if you can't see them. In Alternative A it's recommended, but for Alternative B, we made it a requirement.

And any eco-evaluation involves what is called a no-action alternative. For us, since we have three program areas for the way we have constructed the no-action alternative is that we

would foreclose this kind of work in this area. In other words, just not let it happen, not permit it.

For removal energy and marine minerals, we selected a status quo arrangement, which is permitted by NEPA regulations. We're not seeking to foreclose or stop something that's already permitted or that's already allowed to happen. Renewable energy activities are already allowed in these areas. Also marine minerals are borrowed off of the off shore and brought on shore for coastal restoration and such.

So Alternative C is no oil and gas-type work, but continue on with renewable energy or marine mineral work when it comes to us for action. So that's how we structured Alternative C.

We have our own set of slides, so I'm going to go through this.

Time area closure for A. This area down here is showing the hatchery is a critical habitat area for the northern right whale that is recognized by NOLA Fisheries. This hatchery area off shore Jacksonville extends down the shoreline of north Florida to end here at the bottom of the

southern end of the south Atlantic planning area.

This area in the orange that is surrounding it is called the Southeast Seasonal Management Area and this yellow zone is the Mid-Atlantic Seasonal Management Area. What these are, are zones that have been recognized by regulation promulgated NOLA fisheries to have vessel speed restrictions in their regulation.

What we're proposing here is that we simply not have airgun activity in the same period of time that NOLA has not allowed -- that NOLA requires vessels go more slowly. And the reason for that is that this is the wintering calving area for the northern right whale. They tend to summer off in the New England states. And then, as you might guess, they migrate down the coast generally along the coast in a band about 20 miles from shore. There are whales all through here, but they tend to concentrate close to shore. So as the year progresses, they are moving down the shore to finally over winter here where they calve before they migrate back to where they summer.

So these areas are, during these periods when there are whales there are restricted vessel speeds are now recognized and we're saying: Okay;

no seismic surveying there.

These little coastal bay areas are always important. Of course, lots of vessel traffic so we're saying slow down during these times of year.

We prepared what they -- we call them time/area closures for that time. For Alternative B, the time/area closures, as I've mentioned, are expanded.

Down in the south of the Seasonal Management Area we have an extension along the Florida coast out for 20 miles. And we filled in the gaps in these areas that NOLA recognizes to have sort of a continuous band along both planning areas extend off shore 20 nautical miles. So we consider that an enhancement of mitigation by not having work done there -- not having seismic work done there during those periods that NOLA recognizes for vessel speed restrictions.

And this turtle closure area, moving to the slide -- or the next one over is right down here, about 11 miles off shore. The Brevard County/Cape Canaveral area. This is a very dense turtle nesting area, tens of thousands of leatherback and loggerhead turtle nests are

observed, watched by people.

We're saying: Okay; let's not have any seismic surveying done along this band when the turtles are coming in and laying their eggs, the hatchlings are leaving the sand and going offshore.

This table here is an example of what you could see in the EIS. If you want a good summary of the work that we have done, take a look at Table 2-2 in the document. There what you will see is all of the resource that we've recognized, all of the impact-producing factors that pertain to those resources recognized and then each alternative here.

And then in a matrix arrangement, what you see is what we call significance criteria that are assigned that characterize what the impacts are. For our evaluation, we would characterize impact levels that range from negligible through minor through moderate and major. None of our resources, none of our impacts reach a major level for any resource for any activity. They are something less than that.

This is an example of an airgun that pertain to these particular resources on the left-

hand column. So if you want to just -- you know, it's a big document. It's 1,500 pages. And if you want to try to hydrate your time in understanding what we've done, just take a look at Table 2-2. That's as a good a roll-up of what we concluded as any.

During NEPA evaluations, when we have consultations required by Environmental Law that are done concurrently with the evaluation. With our circumstances, we have consultations with Fish and Wild life Service and National Range Fishery.

For Section 7 of the Endangered Species Act and we have consultations for the Marine Mammal Protection Act as well. These were done alongside the EIS. And if everything here works properly, they tend to be finished, by the time EIS is finished.

For the next step, this our project schedule.

As I've mentioned, we're up for comment now, so we have 60 days to comment on the document. After we've received comments from folks like yourselves, from federal agencies, state agencies, we'll incorporate them into the document and then we'll roll up a summary for

management that would give us some recommendation on how to proceed.

All during that time we have environmental consultations that are taking place, and at the end of all this, we have what's called a record of decision, which is a publication in the Federal Register that says: Okay; now that you have done this work, what have you concluded from it and what does it mean? We forecast that takes place before the end of the calendar year.

I've mentioned the commentary period closes May 30th. We can receive oral testimony from you here today or written comments from you here today or later. We have a dedicated e-mail address at GGBEIS@boem.gov. And a copy of the EIS can be found on our web site and most of the materials that are on the desks out there show what the hyperlink is and you can just click on the document and go right to it.

If you want to send us comments by U.S. Postal, you can send it to this address and that address is also in the public materials that are outside on the tables.

And, in closing, then, I would say -- I would like to say in conclusion, then, that we

have spent about over a year preparing this evaluation. It involves state of the practice integration and modeling for noise in the ocean that are caused by these instruments, airguns, some of the electrical and mechanical techniques.

It's pretty dense; it's kind of complicated. But what we ask and what we need from people like yourself is to take a look at it and draw your own conclusions and send us what you feel would aide in making a better decision, ultimately. Because that's what the Secretary of the Interior is going to do with this document.

With that, I will introduce William Slogar from DSCA International, Inc. And he will talk to you about the marine -- the modeling of impacts for marine mammals.

Will, come up on, please and I'll try to boot you up here.

MR. SLOGAR: Thank you, Tom.

As Tom just mentioned, what I would like to do is describe for you the assessment of potential impacts of marine mammals. One of the earlier slides you saw had a list of 15 resource areas. Those are areas that were identified as potentially being impacted by the proposed action

and marine mammals is just one of those 15 areas.

This assessment process basically is a five-step process, the first step being to identify those resource areas that could be impacted; as I said, marine mammals being 1 of 15.

The next step is to establish criteria by which we would define the significance of the impact.

The third step is to identify impact-producing factors. Also, the previous slide that Tom showed, he listed the impact-producing factors that could result from the proposed action following the two general categories, routine and accidental.

Following that, the next step is to collect data about the proposed action, about the resources impacted or potentially impacted, about the mitigation measures that might be applied, and then, finally. The analysis itself to develop estimates of impact, if any.

Within the area of interest, there are 38 species of marine mammals that can occur. This is a listing of them. And while we're looking at this, perhaps I should better explain the area of interest.

As Tom mentioned and you can see on these maps, it's the two planning areas off the Atlantic coast. The area of interest begins at the end of state waters. The area of interest covers federal waters, so state waters end three miles off shore so the area of interest starts three miles off shore and extends 200 miles off shore.

These various species listed here occur in different numbers and distributions throughout the area of interest, some hardly at all; for instance, the manatee or the three species of pinnipeds, so will unlikely be impacted by the proposed action.

In order to help us establish impact criteria, we look at existing federal law such as the Endangered Species Act and Marine Mammal Protection Act. The Endangered Species Act, of course, is a federal law that identifies species -- lists species either threatened or endangered. And under the Endangered Species Act, there is what's called Section 7, which requires consultation. And so BOEM will be consulting by submitting biological assessment to the National Fishery Service.

One thing I should also mention is that

operators in the future will have to apply for incident take authorizations for their specific surveys. That will not be a part of what's done in this process that we're talking about.

As I mentioned, ESA lists species threatened or endangered. There are seven in the areas of interest. Perhaps the most notable one in this area is the North Atlantic right whale, which Tom talked about some of the mitigation measures that would be applied.

Again, getting back to the Marine Protection Act and identification impact criteria, the Marine Protection Act identifies two levels of harassment to marine mammals, Level A and Level B. And, as you can see, they cover a fairly broad range of things that fall within the harassment category, particularly Level B.

To help us define impact, we ended up identifying four levels as to significance of impact. To define these levels, we looked at number of perimeters: detectability, is the act detectable or measurable; duration, is it short term or long term; spacial extent, is it localized or extensive; and finally, severity. These four levels of impact criteria were identified for this

analysis.

Tom's also prior slide identified impact-producing factors that realized as potential increasing impacts as a result of the proposed action. These five were identified in the analysis of impacts to marine mammals. Obviously, they cover both the routine activities as well as accidental.

There are three basic steps to the impact assessment process, the first being collecting information. Secondly, establishing mitigation measures and finally determining potential impacts.

To help in the analysis, we have evaluated all potential equipment that can be used in surveys and we determined there were six specific types of equipment that cover all those survey types. Two sizes of airguns, a large and small airgun; electrical mechanical sources, side-scan, boomer and sub-bottom profiler and multi-beam depth sounder.

This slide shows what would be anticipated as the level of effort within the area of interest for the time period analyzed, 2012 to 2020. These numbers are lying kilometers, to give

you an idea of the extent of various survey types.

As you can see the from the maps, there are a number of miles or lying kilometers here is two seismic surveys. All of these various survey-types listed are different types of seismic surveys.

This slide, in essence, shows you the same information as the previous slide. What you see here is two of these surveys applied across the areas in which they might occur. The darkest areas indicate the areas where the greatest level of survey activity might occur.

Part of the data gathering process, including gathering information about marine mammals, their range of hearing, the acoustic thresholds of each. And also for the evaluation we used two acoustic impact thresholds for analysis: Sound pressure level approach supported by NMFS as well as the southhall approach.

The modeling effort, as I mentioned, used six different types of sound sources. We looked at 22 modeling sites that were chosen throughout the area of interest to help define it. Those 22 sites helped define it by water depth, bottom

type. Water temperatures is a big factor in sound speed profiles. The result was that 35 different propagation scenarios that were developed. When applying the different sound sources, we created estimates for 105 different acoustic fields.

This slide is an intermedia product of analysis showing different sound pressure levels resulting from the two different sizes of airgun arrays. One of these diagrams -- two of them are different sized airguns would be on the continental slope. The other two on the continental shelf within the area of interest.

This brings us to the acoustic impact modeling that was done, AIM. As you can see, a fair amount of information was fed into the model in order to create estimates. In essences, what AIM does is create a virtual environment of the area of interest with sound sources and the marine mammals that might be impacted.

Information that goes into it include sound source properties and movements that come from the acoustic propagation modeling results, also species distribution and dive and swim patterns, and finally the environmental conditions I mentioned earlier: water depth, bottom type,

those sorts of things.

Also feeding into this modeling is a number of the post-mitigation measures. Because it's important to point out that the results are rather conservative because they don't include all of the mitigation measures that would be applied such as pre-survey reviews of the area by protected species observers, ramp-up processes using the equipment, and then, of course, potentially shut down the surveys if marine mammals might be spotted within the safety area.

This slide summarizes some of the various mitigation measures and how they are applied to the different alternatives. Alternative A, of course, is the proposed action; Alternative C is no action. Here you can see a list of primary mitigation measures.

It's important to point out that alternatives A and B, with regard to the survey activities, are identical. The only difference between those two are mitigation measures. For instance, the time/area closures were expanded within B compared to A. Passing acoustic monitoring is optional in A but required in B.

And there is a third difference here. A

third primary difference is the separation distance between surveys; A doesn't require a separation distance between simultaneous surveys while B does.

You saw this slide earlier. Again, it shows the closure areas and the times that they would be closed along the coast, primarily to address the right whale. This is Alternative A.

Alternative B expands those areas north and south and also includes areas to the south to address turtle nesting off the Florida coast.

I'll conclude with this slide, which summarizes the impact levels for the three alternatives looking at the impact-producing factors that were realized for marine mammals.

As you can see, with the exception of airguns, the impact levels are determined to be negligible or minor for all the impact-producing factors.

That ends my presentation. I will turn it back over to Tom now for the comments portion of this meeting.

Thank you.

MR. BEIRSTADT: Before we offer the floor to the folks here wishing to speak, we need some

guideline for fairness.

Our goal is to allow comments from everyone who has signed up to speak until we are done. Federal and State representatives and other elected or appointed officials will speak first with no time restrictions.

We ask any members of the public police themselves to limited it to three minutes per speaker. When all who wish to speak have spoken, the floor will be open for additional comments.

We're here to receive comments on the draft document. Comments about anything other than our draft document really doesn't support our reason for being here.

People making comments need to address us up front as opposed to addressing the audience in general. We can take short general information-type questions, but we're not really here to debate the merits of the document or the proposal.

So with these guidelines, I'll call the first speaker, State Senator Paul G. Campbell, Jr.

SENATOR CAMPBELL: Would you like me to speak there in the middle? Is the microphone on?

Usually, I don't need a microphone.

You know, it is dangerous when you say elected officials and public officials can talk without the time limit. I don't know if you said that or not. I think I had stepped out of the room when you said that. But it is a pleasure to speak to you this afternoon to talk about this potential opportunity for South Carolina.

I chaired the off shores natural gas study. We met for about a year. We had people on the panel from industry side, the environmental side, from the South Carolina Department of Environmental Control, for the South Carolina Department of Natural Resources, from my chosen community, our agricultural community, our industrial community. We met over the state. We took comments about the potential impact if we do off shore exploration for natural gas.

We had the USGS come in and talk about what they thought might be out there. We talked to the folks, the geologists, that have been doing studies out there. We looked and, quite frankly, didn't see much in our state waters within the three-mile limit. It looks like we have go off some 60 or 70 miles before there is potential for

gas. But it looks like there is some significant amount of natural gas at the Carolina trough, if we can it get out that far.

To get this some background, you know, what I would like to do is to reach out some comments, talk to you about comments. You know, I might be a dumb official to you. We know that South Carolina has some history because we have done this. And, again, we've look at all aspects of our economy, all the folks from the environmental side and the industrial side.

We know that natural gas is out there. We know that we depend on natural gas in South Carolina. And we don't have a fuel in this state to generate electricity. So this would give us an opportunity to do that. It would save us that transportation cost, so it would significantly impact our economy and the state if we do some of these things. Plus it would create jobs over there.

We also know that the natural gas is being used for many, many different things. Basically, it's really a raw material for plastic. It's a raw material for textiles. It's a raw material for all chemical products in

addition to creating electricity. So we know if it's out there, we can take advantage of it and our economy will be better. And we think we can do it safely and we think we can do it appropriately.

My backgrounds is that I'm a chemical engineer and I've work in the industry most of my life. I'm a retired president of Alcoa. I know a little bit about the energy side of the equation.

I want to elaborate a little bit about the testing that I understand that these as these things come to view, so that we can check that this exploration can be done safely.

Basically, first of all, the oil and natural gas industry will do everything to make sure that our marine life is protected as much as possible. And we talked about some of the things you mentioned earlier, the protection that already exists and what you guys require.

This is what the industry wants to add to it; for example, to train marine mammal observers on board to watch for mammals, a seismic survey standard operators use a round up procedure so that the sound is gradually ramped-up so that any animals that are being impact will have an

opportunity to move out of the area where the seismic study is being done, if it's at all uncomfortable.

If the operations detect any marine mammals in the area, they will stop and they will not start again until at least 30 minutes past the detected marine mammal. And if you add these to what you talked about and what your protections are today, I think we can do this exploration safely.

And, most certainly, if we find natural gas off the coast of South Carolina, that definitely benefits our state. I've mentioned some before, you know, the possibility of oil payments to the states there. We know that in the Gulf Coast that there are oil payments to the states there. And some of the oil payments can certainly then help the economy in this state. We could use them, for instance, on our infrastructure, what we're trying do for the port.

This year -- this week in the State Senate we passed a conservation fact finding and we could use it for conservation purposes. So we can see a lot of beneficial uses for the population, for the citizens of South Carolina and

for the economy of South Carolina. I think that is very, very important.

Well, it will certainly be able to support more jobs. Not so much the jobs that would be off shore because they are somewhat limited there, but it would bring natural gas to the state for energy production, for chemical production, for fertilizer production, for many, many different things. And keep our folks that do this more economic or in balance with other competitors in other states and other places in the world. So we can use this money very, very wisely if you will allow us to do this and we do find natural gas. And I think that it's out there off the shores of Charleston, South Carolina.

We do care about the environment in this state. The Carolinas attract tourism. That's why we have tourism involved in the off shore natural gas study going into it this year. We are satisfied that we are doing things appropriately and safely so we don't hurt our tourism industry.

We have an environmental side there because we want to make sure they understand exactly what we're trying to do so we don't harm the environment of South Carolina. We depend on

tourism and we depend on other industries. We depends on many, many different things.

And again, it keeps us from relying on off shore energy production. We don't want to be depending on somebody else if we can independent in this country. We would like our lives and our situation to be better in this country. So to allow these things would give us the chance to be energy independent because from we've seen what you guys have shown is that potentially it might be out there, coupled with what hydraulic fracturing is doing for natural gas reserves in this country, what we were seeing is, we can improve our energy independence as opposed to relying on someone else. So I think that's very, very important.

I would urge the Bureau of Ocean and Energy Management to consider the pro-development of this part of the region of the continental shelf, the east coast continental shelf, because I do think we can do it safely. I think we can do it safely. And I think the industry would do it safely, and I think we can show everyone we can be a model for what goes on as far as finding this stuff.

So I do encourage you to go forward with this and allow them to do exploration tests in our areas.

I'll be happy to answer any questions you might have about it. Thank you for allowing me the opportunity to speak to you.

MR. BEIRSTADT: State Representative Jenny Horne.

MS. HORNE: Thank you for allowing me the opportunity to speak on behalf of the citizens of South Carolina.

As we all know, gas prices are on the rise, not just here but all around the country. And nationally, the average price of gasoline is over $3.90. Here in our state the price has risen to an average of more than $3.80 per gallon. For a car with a 15 gallon tank, that means you're shelling out about $60 each time you're filling up.

These rises in gas prices are putting the squeeze on South Carolina families and for far too long our country has been dependent on foreign nations to meet our energy needs. The Talmasha Middle East region remains a major supplier of energy to the United States, which means that

we're susceptible to the effects of any sabre-rattling in the area have on the global price of energy.

Currently, Israel and Iran are exchanging threatening messages, markets around the world are fearful of hostilities at that could effect the crude oil production and export from that area. Why do we continue to put ourselves at the mercy of foreign countries? It is time that we started depending more on ourselves and on America's undeveloped resources.

Recently, the Bureau of Ocean Energy Management announced that it can conduct new seismic surveys at the Atlantic outer continental shelf, part of which lies off the coast South Carolina. We need these studies because the last surveys of this region were conducted more than 25 years ago, especially since recent technological developments have given us much more sophisticated tools to analyze the data from these surveys and to recover oil and natural gas resources discovered through the use of this data.

Estimates change because technology changes that were previously thought

unrecoverable. With this new geological theory about where oil and natural gas might be located, we don't need arbitrary capricious policies that hinder developing these much needed resources. And, unfortunately, because of some policy decisions, we are not able to lease this energy resource region to companies for development until at least 2018. But we need the benefits of new development today.

A recent Wood-Mackenzie study estimates that increasing development would create approximately 5,000 jobs in South Carolina. These include jobs involved indirectly in developing new energy as well other related jobs in construction, manufacturing and other sectors that affected indirectly by new development.

By choosing to develop these off shore areas, we can and should put thousands of South Carolinians back to work much helping to secure our energy's future now, not six years from now.

By choosing new energy resource development will also mean millions of dollars in new revenues and royalties for our state. Estimates for South Carolina are somewhere around $500 million according to Wood-Mackenzie study.

This money could be used to fund education, improve roads and bridges and many other critical services the state provides.

I urge you to deliver the South Carolina message of supporting the testing that must be done to let us know if there is oil and/or natural gas off the coast of South Carolina. This new technology that will be used will not disrupt marine life. In fact, trained marine mammal observers are onboard to watch for mammals. Operations stop if an marine mammals enter an exclusion zone, as Senator Campbell previously mentioned, and the operation is not restarted until the zone is clear for 30 minute.

If oil and natural gas is found off our coast, we will have the opportunity, along with other states in the South Atlantic region and across the country, to produce American energy for Americans.

Our energy future can't wait until 2018. There has never been a better time than now to begin putting South Carolinians to work securing America's energy future. Thank you very much.

MR. BEIRSTADT: Thank you. Anne Johnston.

MS. JOHNSTON: Good afternoon. My name is Anne Johnston. I am the mayor of St. George, South Carolina. I want to thank you for giving me the opportunity today to speak to you about the positive affects of being able to find and produce American energy.

I understand that the proposed action is to allow geological and geophysical activities in support of oil and natural gas exploration and development of renewable energy and marine minerals in the Mid- and South Atlantic planning area. I urge the Bureau of Ocean Energy Management to move forward with 2012 levels to determine what may be out there in the outer continental shelf.

Gathering new data is important, as Representative Horne said, because the current estimates are based on decade's old information, information that not has not benefited from the advances of technology, for decades. I understand there has been no testing off the coast of South Carolina and North Carolina since the 1970s and very earlier 1980s.

It seems to me that any possibility of finding oil and/or natural gas off our coast an in

environmentally sound manner is positive and exciting. I'm quite concerned about the jobs that have been lost in the United States and, indeed, here in South Carolina in recent years.

I find it difficult to name one reason why this state and other coastal states would not pursue the benefits of new industry for the sake of job and capital investments that come from it.

I ask myself and you who are here today, why should these jobs go to other countries? Currently, the unemployment rate in South Carolina is 9.1 percent. For each new job created by off shore exploration and production, there will be substantial creation of other jobs to support these efforts.

For example, in the coastal areas where drilling might take place, there would need to be restaurants, motels, helicopter pilots, helicopter infrastructure, fuel, supplies -- fuel, supplies, mechanics, offices for support activity, grocery stores and companies which supply equipment and other support services off shore and on shore as well as construct the infrastructure required to drill off shore.

What is not to like about the prospect of

the creation of jobs in an environmentally sound manner? We don't not need to send these jobs to the foreign countries, particularly those who do not hold the United States in great esteem.

I understand that today you want to hear about moving forward with the testing that will be needed to be done in order to found out what is out there off the coast of South Carolina. Believe me, we South Carolinians love our coast and our marshes, our beaches, our creeks and the vast Atlantic ocean. They are a part of the history of our state and certainly part of it's beauty.

The attraction of the coast and drilling for oil for natural gas does not need to be mutually exclusive. Today, in the year 2012, there is technology that can and does find oil and natural gas more easily than 20 years ago. I also understand the finds are bigger now due to the technology changes and new geological theories about where oil and natural gas might be.

My son is a pilot for Delta Airlines. We have discussed the positive impact of natural gas -- the positive impact that natural gas can have on this country. Aviation, agriculture and

oil are three of the biggest components of the GDP. Airlines use jet A fuel. Trucking companies use diesel fuel. Both are highly refined petroleum products that compete for production capacity.

The biggest single factor that would reduce pressure on refining capacity and thereby bringing down the cost of jet fuel would be to convert all long-distance trucking fleets to natural gas. If we can produce more natural gas and have a long-term stable supply, trucking costs -- excuse me -- trucking companies would find conversion economic and economically affordable.

Aviation costs could go down. Certainly aviation has brought jobs to South Carolina. I urge you to approve forward motion of using seismic surveys to start this important process that would provide jobs and revenue and decrease our dependence on foreign countries. Thank you.

MR. BEIRSTADT: Jeff Hamley. Mr. Hamley? Trip Talson? Rick Cobb? He signed up to speak. Kathy Norbinger?

MS. NORBINGER: That's close enough. I answer to a lot of things.

Mr. Goeke and Mr. Beirstadt, thank you for giving us the opportunity here today to speak. I am not a geologist and I'm certainly not a oceanographer and all those important things a lot of you folks are, but I do have a 30-year-old career in energy and I am retired from SCANA Corporation, which is the parent company for South Carolina Electric and Gas. After 30 years of service there, I retired as a senior officer, so I do have some background in energy.

I'm here today, though, representing Palmetto Agribusiness Counsel. I serve as the Executive Director of the state-wide association. We represent some of our state's largest agribusiness employers and we have a mission to sustain the economic viability of our state's largest industry, Senator.

And we are all the ultimate environmentalist. We live off the land. And by the way, we produce energy. We produce the fuel, if you will, for our bodies.

I'm speaking on behalf of this organization in support of the surveys and studies that can resolve to enable the possibility of off shore drilling for energy sources off the coast of

South Carolina. They are being located in states that boarders our great Atlantic ocean. A point I mentioned, by giving our state an opportunity, we can be a contributor now. South Carolina can be a contributor to our nation's fuel stability.

Safe off shore exploration of additional fuel supplies can also have the ability to capture those untapped natural resources that could assist us in reducing the price of our much-needed fuel supply.

It is our belief at Palmetto Agribusiness Counsel that there is not a single bullet -- not a silver bullet that will reduce fuel prices, maintain stability and totally removed our dependency on fuel oil. But we do, however, ascertain that it will take a variety of alternatives and renewables to help our nation move forward in making positive energy strides.

Vast practices in wind, solar and geothermal, biomass and traditional production are all components of that solution.

Food harvesting, production and transportation of food are heavily dependent on energy. Exploration of fuel alternatives can serve to assist us in finding ways to reduce the

cost of food to our consumers, discourage the importing of foods that are not as tightly regulated -- and I hate to say it -- not as safe as the food grown in our own backyards.

We are asking for an opportunity, however, an opportunity to update, through this new survey technique decades-old data that you have heard about that could result in providing our nation another source of a much-needed energy supply.

The first step to the development of our off shore resources is approval of seismic surveys in the Atlantic outer continental shelf. The knowledge gained would help support leasing, drilling and development that could mean creating thousands of jobs and billions in additional revenue dollars.

In fact, projections are that developing our own energy resources in off shore waters and other federally-controlled areas could create much-needed new jobs in this terribly struggling economy.

All businesses, all consumers would benefit from a greater supply of domestically-produced fuel strengthening America's security

while keeping our energy costs maybe not low, but certainly help us keep them under control.

You know, in our office, we're constantly having people come in with new techniques and new ideas on fuel production feed stock. We talk about switch grass, chicken waste, anaerobic digesters that use food waste, soybeans, wood pellets.

I've seen a sweet potato -- a 50 pound sweet potato this big that could be used to produce energy. And the list goes on and on. We encourage all of those, just as we encourage the off shore drilling of our natural resources.

We urge you definitely to move forward with the proposed action here today. Thank you for allowing us to speak in your consideration.

MR. BEIRSTADT: Kay Clamp.

MS. CLAMP: Good afternoon. My name is Kay Clamp. I'm the South Carolina Petroleum Counsel, which, as you probably know, is the state office of the American Petroleum Institute in Washington D.C., which I'm sure you know.

Let me start off by saying I was born and bred in Charleston, South Carolina. Our coast has been an integral part of my life. My brother and

my father and I went flounder gigging on the end of the Isle of Palms for many, many years and enjoyed it. And I learn early on how important our beaches and our oceans and our tidal creeks were to me and to my family.

For many of us who have been lucky enough to grow up with the ocean as a friend, we certainly want to preserve and protect the wonderful resources that we have. But I am completely confident that we can enjoy the coast and create jobs and revenue for people of the state. We can have both.

In the world today there cannot be a choice between the joy of our environment and the activities and their genres and the creation of jobs for the people of South Carolina. We need them both.

I'm excited about the prospect of new jobs in South Carolina. It will include those as have been mentioned previously that will come directly with exploration and production. But there is more to come with that with all the support jobs that are absolutely necessary, and South Carolina is ready for those jobs.

Our state has a great program of

incentives for industries to relocate here and hire South Carolinians.

Let's talk about what comes next in terms of finding this natural gas or oil. I think probably it is natural gas. We've talked about seismic testing today and the method of testing is far more advanced than that was done off the coast North and South Carolinas in the late '70s and '80s. But with these new technologies, I am more than sure, our environmental impact of these seismic studies will be minimized.

The seismic testing of today will identify where the natural gas is and where it is not. If we do find natural gas, chances are we may have more natural gas than what is anticipated. With our industry's history of looking, it's active exploration and development often leads to increased resource estimates.

Obviously, if natural gas is found, it is my hope that the energy policy of the future will include an assessing of these natural resources. It does seem like many of the environmental groups on the national level are saying no to everything with exploration production of oil and natural gas, no to the keystone pipe line, no to hydraulic

fracturing used to access oil and natural gas; and the list goes on.

But no is not an environmental policy. We need natural gas to heat our homes and schools. It will bolster manufacturing, fuel our fleets. And to insure a well-balanced plan to preserve the environment and to access the fuel we need.

You may recall a movie that came out many years ago. It was a baseball movie. One of the sayings that came from that movie was: If you build it, it will come. And that applies to our situation here today. If you will allow the access, then the jobs and revenue will come to South Carolina.

Thank you for your presentation today and thank you for being here. We appreciate it.

MR. BEIRSTADT: Denver Merrill.

MR. Merrill: Good afternoon. Pleasure to be here today.

I'm here on behalf of a group for Citizens for Sound Conservation. We're here to voice our strong support for the proposal activities on the Atlantic continental shelf. Our organization is dedicated to promoting an appropriate balance between economic growth and

responsible usage of our natural resources. We don't take this issue lightly.

Our supporters includes a wide variety of business interests who've studied this issue and believe that seismic studies and associated G&G activities can be done safely as our prudent first step towards improving our economy and increasing our energy independence.

According to government sources, there are at least 86 billion barrels of oil and a 400 trillion cubic feet of natural gas that are technically recoverable from federal off shore areas. Of that amount, it is estimated that 3.3 billion barrels of oil and 31 trillion cubic feet of natural gas are off the Atlantic coast.

Given today's volatile energy prices, economic stagnation and high unemployment rate, our supporters believe access to these domestic energy supplies to essentially, provided our coastal environment is protected to the maximum extent possible.

Senator Campbell and Representative Borne touched on the safety measures and were confident that those will be undertaken. And I think even the presentation itself earlier said that the

investigation said the effects will be negative and you were very confident that it can be done safely.

Everyone's heard the estimate. The simple fact is we really don't know how much is off the coast. As other people have said, the data's old, 25 years old, at least. A lot of changes have happened over that period, particularly the technology. As you're aware, the original surveys have lasted through today. Reported recovery oil estimate is at 9 billion barrels.

New survey conduction techniques have helped support over 16 billion barrels in that area today. Oil estimates in central and western Gulf of Mexico increased by 400 percent while natural gas resources have more than doubled due to new technology, the very technology that we'll be using here.

We need as much information as possible about the Atlantic OCS energy reserve so we can make intelligent decisions about our nation's energy future. The seismic surveys of those are key to those decisions. New seismic survey techniques can give producers a vast, more

detailed accounting of those OCS resources that could be done safely.

Our need is imperative in order to have a comprehensive debate over whether to allow further exploration of drilling and could result in hundreds of thousands of new jobs and dramatic increases in domestically produced energy.

As we all know, though, without these new seismic studies, there will be no leasing and without leasing, there will be no drilling and without drilling, there will be no development industrial potential for additional jobs or revenue that off shore oil and natural gas drilling can bring.

It is encouraging to see the federal government to start this process forward and recognize the need for our nation to begin realizing more of its own energy resources. The studies and activities discussed here today are necessary first step toward increasing and towards the creating of a more secure country, a more comprehensive and rational energy policy. And for these reasons we ask that you move forward with the proposed plan.

Thank you for your time and

consideration.

MR. BEIRSTADT: Tom Brooks.

MR. BROOKS: My name is Tom Brooks. And I'm an engineer by training. I have worked in the off shore oil and gas business starting in the early '80s. I've worked off shore Texas. I've worked off shore Louisiana. I've worked off shore Canada. I've worked Alaska, both on shore and off shore. I've worked nine years in Russia. We did the largest oil gas project that's ever been -- from a financial standpoint that has ever been done in the world. I talked to you about the Songling Project (phonetic).

What I want to say is: I wasn't quite sure what to say. But I'll tell you what, I heard the comments today, particularly from the legislatures and officials and other folks in the room. They are encouraging you to move forward. That is really what I wanted to tell you.

I've talked to the folks in my community and friends, and everybody said: Tom, tell them to get on with it. This stuff has been done for decades and is probably a lot safer now than it has been 10 or 15 years ago. But it's been going on for decades.

People in Louisiana are quite happy with it. The people in Texas are quite happy with it. The people in Alaska are quite happy with it. People have been doing this for years and years and years.

Russia -- I'm telling you, when the Russian government did this, they pushed us so hard it was just incredible. When they wanted to move on laws or regulations or approvals, they did so. That may be a surprise to you.

My plea to you is: let's get this stuff done and get moving along as fast as you can. Thank you.

MR. BEIRSTADT: Mike Smith.

MR. SMITH: I am Mike Smith. I am here on behalf of my business partner, a Medal of Honor recipient, General Jim Livingston of Mt. Pleasant. He has asked me to read a few of his thoughts as he couldn't be here today.

The policies that force Americans -- it's important for you to see the importance of persuing more aggressively the exploitation of energy resources here in the United States -- the policies that force Americans to rely so heavily on foreign sources of oil reveal an inconvenient

truth. Many officials prescribe more value to the environmentalist than the safety of our men and women in uniform and the strength of our economy. And lately, these officials have been anything but candid with the public about the truth all of us Americans pay for our dependance on foreign oil.

It's easy to identify the retail price increase for a gallon of gasoline since President Obama's inauguration. It has more than doubled. What is more difficult to calculate are the additional costs Americans incur through the federal government's use of our treasure to promote stability in oil markets, notably, by policing the middle east.

Apart from kinetic operations in the region, the cost of keeping our aircraft carriers in the middle east from 1967 through 2007 exceeded $7 trillion; that's in 2008 dollars. Given the primary reason for the presence in the region is to protect oil trans routes given that the U.S. is not the top consumer of middle Eastern Oil, it is difficult to argue that this does not constitute a substantial subsidy for world oil markets.

It is also difficult to argue that this is not an unnecessary form -- pardon the double

negative -- a foreign gate provided to top consumers in mid-east oil like Europe and China, of the latter of whom we are borrowing a lot money from to conduct these expensive operations.

While those costs are substantial, so too are the opportunity costs we encounter by relying on foreign oil verses more aggressively pursuing extraction opportunities in the United States. According to estimates put by Harold Hann (phonetic,) CEO of America's 14th largest oil company: If Washington would allow more drilling permits on federal lands and in federal waters, the federal government could raise some $18 trillion in revenue through royalties.

Put simply, importing oil impacts the national security of the United States and that impact is not positive. Without a strategic pivot that places the emphasis on pursuing price stability with an emphasize on doing more to insure our access is much easily runable, we will continually to unnecessarily risk the health of our economy along with the lives of our men and women in uniform.

In as much as we should pursue innovative technologies as they reduce our dependence on

fossil fuels, we should also pursue policy innovations that can drastically reduce the true cost Americans pay for access to petroleum products.

Policies that expand our access to domestic energy resources, including oil and natural gas that may be located off the coast of South Carolina will pay dividends. These policies will generate short-term and long-term jobs as well as substantial growth in a critical sector of our economy. Such policies also enhance our economy security by substantially diminishing the abilities of foreign actors to produce American's access to its resource that has come the lifeblood of our economy. Thank you.

MR. BEIRSTADT: Chris Carnival.

MR. CARNIVAL: Thank you, Mr. Goeke and Mr. Beirstadt. I have submitted these comments in written form. It's more than I can get to in three minutes, but this is true and accurate.

On behalf of the Sutherlans for Clean Energy, I would like to thank you for the opportunity to discuss off shore energy and would like to voice our support for off shore wind energy while urging a moratorium forum on off

shore oil and natural gas development in the Mid-Atlantic and South-Atlantic planning areas.

I will make two points and then provide a series of recommendations on the draft Programmatic Environmental Impact Statement.

Our first point is that off shore wind energy is a better investment than off shore oil and gas. The Mid-Atlantic and South Atlantic have the best off shore wind resource in the country with the ability to produce enough electricity to power tens of millions of homes and provide many thousands of jobs with no air pollution, no risk of a catastrophic accident, no water consumption, no mining operations and no risk of resource depletion.

Or second point is that Mid-Atlantic and South Atlantic off shore oil and gas prospecting is not very productive and, in fact, harmful. Extending G&G activity outside of areas interest to wind energy set 350 nautical miles from shore as it indicates in the Draft Programmatic Environmental Impact Statement will significantly increase shipping and aerial traffic. This could cause displacement and mortality of marine species including fish, sea turtles and marine mammals,

particularly the North Atlantic right whale.

Considering previous estimates they admit that they did seldom use hydrocarbon resources and indicate only small amounts of being economically recoverable oil and gas. The near-term risks to the marine environment far outweigh the potential benefits of eventual drilling.

In order to promote off shore wind energy and minimize financial and ecological risk associated with G&G activities, the Southern Alliance for Clean Energy make the following recommendations.

Firstly, contain G&G activity to the wind energy areas designated by BOEM. Thus far, BOEM has identified areas off of Virginia, Maryland and Delaware in actively working with task forces in North Carolina and South Carolina identified wind energy areas off aerials.

Designating areas for G&G activities will minimize oceanic traffic and will be maximally beneficial for off shore wind energy development. BOEM should only work to develop wind energy areas for Georgia and Florida.

Secondly, limit G&G activity to collect relevant data for near-term off shore wind energy

deployment using Europe's long history of off shore wind energy has a president, G&G activity should focus within 50 meters water depth and 50 miles from shore. Most turbines utilize pile-driven modified foundation structures in submarine interconnection cables. Shallow water near shore, shallow penetration G&G activities are best suited for off shore wind energy deployment technologies in the near-term and BOEM should focus its efforts on these types of activities.

Deep penetration seismic survey long-term magnetic survey might unnecessary for off shore wind energy development and thus should be for gone.

Thirdly, minimize overlapping of similar G&G activities in the mid and South Atlantic. Increased shipping traffic and intensive acoustic surveying are likely to have impacts on marine environment. Due to undue politic G&G activity is likely to decrease even faster by reducing ship traffic.

Fourthly, for other G&G activities, which is from November to April, which is when the North Atlantic right whale are mostly likely to be within the Mid-Atlantic or South Atlantic planning

area.

Finally, during G&G, activities specifically design for off shore oil and gas resources estimates or having limited applicability to off shore wind industry. Thank you.

MR. BEIRSTADT: Chris Desharon.

MR. DESHARON: Thank you. My name is Chris Desharon. I worked for Southern Environmental Law Center here in Charleston, South Carolina. SELC works in a six to eight week with a mission of protecting the region's environment and natural resources. We appreciate the opportunity to appear here today to comment on the proposal at issue.

We belief the administration show choose the no action alternative to keep dangerous oil and gas exploration off of the coast for the following reasons.

As a threshold matter, it is important to understand that we cannot drill our way out of high gasoline prices. According to the US Energy Information Agency, fully developing all of our recoverable off shore oil reserves everywhere would low the price of gas by about three cents

and would take about 20 years to do so.

Although allowing seismic surveys will not affect the price of gas, it is certain that allowing these surveys will damage our ocean resources in a major way. Seismic surveys involve the use of airguns which will lead intense blasts of compressed air into the water that are just about as loud as explosives.

For marine mammal relying on hearing to feed, mate, travel and communicate, these intense blasts interfere with the ability of marine mammals and other wild life to hear and survive. In fact, survey airgun noise is loud enough to mask whale calls over thousands of miles destroying their ability to communicate and breed. Airgun noise can also drive a whales to abandon their habitat.

Whale companies have already applied to run hundreds of thousands of miles of airgun surveys off the east coast. Over the next eight years, according to the administration's own estimates, seismic exploration would injure up to 138,500 marine mammals and disrupt marine feeding, calving, breeding and other vital activities more than 13.5 million times.

Airgun noise and oil and gas development more generally alter or threatens our fisheries and coastal economies. Airguns have been known to displace commercial species of fish on a vast scale over thousands of square kilometers. The result has been to dramatically depress capturing species such as cod, haddock and rod fish across large areas as big as the state of Rhode Island. This, of course, has negatives impacts on commercial and recreational fishermen.

In South Carolina alone there are more than 6,000 fishermen jobs, more than $440 million in recreational fishing sales and more than $70 million in commercial fishing sales. In addition, South Carolina's tourism and recreation industry generates more than $2.2 billion and more than 55 thousand jobs. Off shore oil drilling in the Atlantic could be devastating for recreational activity in South Carolina.

To reduce harm, airguns must be kept out of sensitive environmental areas. We recommend promoting the use of less damaging alternatives and require companies the share data. Less damaging alternative technology that could substantially cut the environmental footprint of

airguns are already well into development and can be available for use in three to five years or less.

However, the administration is proposing to allow the use of current, more dangerous technologies now. There's no reason to rush ahead with dangerous airgun surveys when less harmful technologies will soon be available.

Also, the plan under consideration would allow seismic operators to reshoot the same area again and again so they can resell the same data to oil companies. This is the case even though the agencies own experts have called for data sharing to the minimizing the noise.

The administration should not allow for duplicative surveying. Shooting airguns and drilling off our coast does not make sense. Ultimately, if we care about our fisheries, our marine life and our coastal economy, the administration should promote off shore renewables like wind farms.

Scanning the ocean floor for wind farm development uses a technology that is far safer than high intensity airguns. We urge the administration to chose Alternative C and release

an environmental impact statement focused on the development of renewable energy. Thank you.

MR. BEIRSTADT: Thank you. That's the end of the list for people who have signed up to speak. If there is anybody else that would like to make a statement, come forward. And please say your name and spell it for the Court Reporter.

MR. RAPPACK: Sure. my name is Steve Rappack. First I want to applaud everybody making their way out here. I notice there are about 150 seats here and we have maybe 25 people that actually are not part of the demonstration here.

I will say that personally I don't like identifying myself necessarily with groups, but I will say that I am a member of a group of roughly about 250 members, 300 members and I can relatively sure I can speak for them.

First off, I guess the biggest thing that we need to do is go ahead and get as much energy here as possible. We need to go ahead, and if we got natural resources, let's go ahead and do it. So I think all of us here would agree or most of us would agree that we need to develop the resources.

The second thing is, I hear other options

as far as energy development. I would suggest that there is no conflict between the drilling and seismic activity that we want to do to find out what we have got and having wind farms. All I would say is: You know what? Let the private industry do the farms. If the private industry can't make it work, then I certainly don't want tax dollars going towards it.

As far as addressing things to you fellows, you had mentioned that you don't necessarily want to get to the methodology of the presentation there, but I will say that obviously there was a bias to begin with on this. Because you've given three options, all of them would be considered maybe environmentally friendly, whereas if you have true people that don't even care about the environment, they would say drill with everything you've got and do it right now and forget everything else. But that's not one of the options, you guys started from the center and just most left from that point.

The second thing I would like to know on moratorium zone, the airguns. With Option A, you have got five months that you can't use airguns. How much exploration -- because I'm ignorant on

this -- how much exploration can be done if you're not able to use the airguns? In other words, already you have got half the area you can't do these things. So how is that going to impact the overall ability to research this?

MR. GOEKE: We will have to tailor survey programs for those area closures, time limits.

MR. RAPPACK: So with that, though, if it turns out somebody started doing the research here, what's the possibility that all of a sudden this moratorium thing comes in and all the research has got to stop now, or is there an awful lot of other stuff that could be done?

MR. GOEKE: Let me make sure that we're understanding.

MR. RAPPACK: Okay.

MR. GOEKE: The entire area would not be closed. We're talking about special areas along the coast that would be protected for marine mammals, so the areas off shore would still be available.

MR. RAPPACK: A hundred miles out, 200 mile out or whatever, we can still do the airguns?

MR. GOEKE: Yeah, yeah. They have a special area.

MR. RAPPACK: That makes me feel a little bit better. Looking at this, I noticed you had option A, option B, option C. And unless you're really immersed in this stuff, really it's tough to tell the difference.

Let me see. One other thing: As far as the terms you guys are using. Potential: I here potential an awful lot. Potential can mean an awful lot of anything. I hear "moderate." Moderate is a relative term. There are times that I saw statements up there saying that something -- there wasn't going to be any impact or there was negligible impact or there was major impact or whatever. I guess it's just sort of interesting that for those of us in the audience that aren't really behind the scenes developing this whole thing, these being relative terms, I don't know that we're ever really going to get a good idea for exactly what goes into saying we like option A, option B. Certainly we know what option C is, but option A or option B. But that is just an observation there. Anyway, I had other thoughts, but I don't have any more time, so thank you very much.

MR. BEIRSTADT: Would anyone else care to

make a comment? Anyone at all? Yes, sir.

MR. RITCHER: I'd like to make a comment.

MR. BEIRSTADT: Please state your name and spell it for the Court Reporter.

MR. RITCHER: My name is Bill Richter, R-i-t-c-h-e-r. I am here as a potential users of all the technology that we're hearing about. It seems to me generally something that needs to be done in this area of producing electricity or power or however you want to put it from the ocean based on what is in the ocean. And various people have various ways of doing this.

It seems to me what should happen next is for the people who have come up with these ideas of what to do, put them together and get them to the House of Representatives in Columbia and say here's how much money we need to do it. Because it does look like someone has to put up some money to do it. And I think that's the way to do it. And if anyone is reluctant to take on managing this stuff once it gets to the House of Representatives when they know what is coming, I'll be glad to volunteer to help take care of that part of the problem.

MR. BEIRSTADT: Thank you, sir. Yes,

ma'am.

MS. ENSOR: My name is Linda Ensor and I may be a part of some 250 people I'm with, but I'm with a conservative group in Summerville. If any reporter has said that America has a choice between purchasing oil from our closest neighbor and best friend, Canada, or from our nation's worst enemies, we know what choices have been made. We need to do everything we can to be energy efficient. Since your study has showed any significant impact, I can see no reason why we shouldn't proceed with all speed.

MR. BEIRSTADT: If there is nothing else, I would call these proceedings closed.

(The public meeting was concluded at 2:40 p.m.)

CERTIFICATE OF REPORTER

STATE OF SOUTH CAROLINA)

DORCHESTER COUNTY)

I, Naomi E. McCracken, a Computerized Stenotype Reporter and Notary Public within and for the State of South Carolina, duly commissioned and qualified, do hereby certify that these proceedings were taken by me, reduced to stenotype, afterwards prepared and produced by means of Computer-Aided Transcription to the best of my ability and that the foregoing is a true and accurate transcription of the proceedings so taken as aforesaid.

I do further certify that these proceedings were taken at the time and place in the foregoing caption specified, and was completed without adjournment.

I do further certify that I am not a relative, employee of or attorney for party or counsel, or otherwise interested in the event of this action.

I do further certify that I am not, nor is the court reporting firm with which I am affiliated, under a contract as defined in Civil Rule 28(D).

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Summerville, South Carolina on this 2nd day of May, 2012.

Naomi E. McCracken,
Computerized Stenotype Reporter
And Notary Public in and for
The State of South Carolina.

My Commission Expires October 4th, 2020

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