U.S. DEPARTMENT OF INTERIOR
BUREAU OF OCEAN ENERGY MANAGEMENT
AND

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL MARINE FISHERIES SERVICE
+ + + + +

GULF OF MEXICO GEOLOGICAL & GEOPHYSICAL
(G&G) ACTIVITIES PROGRAMMATIC
ENVIRONMENTAL IMPACT STATEMENT (EIS)

+ + + + +

PUBLIC SCOPING MEETING

MONDAY

JUNE 10th, 2013

+ + + + +

TAMPA, FLORIDA

+ + + + +

The Scoping Meeting convened at 6:30 p.m. Eastern Standard Time, Gary Goeke, Moderator, presiding.

BOEM AND NMFS STAFF PRESENT:

GARY GOEKE - Chief, Environment Assessment

BETH NORD - NEPA Coordinator

PUBLIC SPEAKERS: EDDIE PHARR		Pag	ge 2
EDDIE PHARR			
CHRISTOPHER DOUGHERTY	PUBLIC SPEAKERS:		
CHRISTOPHER DOUGHERTY			
DAVID MICA	EDDIE PHARR		18
	CHRISTOPHER DOUGHERTY		21
CATHY HARRELSON 29	DAVID MICA		22
CATHY HARRELSON 29			
	CATHY HARRELSON		29
AL HINE			

1 Mexico.

The Bureau of Ocean Energy

Management, as you may know, is one of the

agencies within the Department of the

Interior, whereas NOAA and NMFS are one of the

agencies within the Department of Commerce.

So we've reached across agency lines and we

are working together on a single document that

affects both agencies.

The reason we can do this is because of the National Environmental Policy Act. NEPA, as it's abbreviated, NEPA is the grandfather environmental law that allows the Federal Government to coordinate and to do detailed examinations of potential environmental impacts as a result of the activities that the Federal Government is undertaking.

This law in NEPA requires that we have coordination with other federal agencies and with the public and things like this. It sets up a series of steps that involves public

Page 5

hearings, scoping, things like that. And that's why we're here tonight.

We're here to get help. We're at the very early stages of an Environment Impact Statement, and we're here to get help and solicit comments from locals, from NGO's, from city and state governments, to give us their thoughts on the types of issues that we may need to address in this environmental EIS.

We have a lot of ideas on how we may want to do our geological and geophysical EIS, but we want to hear thoughts from other people as well. That's the purpose of scoping, is to try and figure out what are the issues that are important and what are the issues that may not be as important that we don't need to examine in detail in the EIS.

Through the EIS process this is sort of a step-wise process that has been set up by an agency known as CEQ, Council on Environmental Quality. CEQ establishes scoping early on so that all the federal

agencies could get comments at the very beginning of the process from all interested parties.

The purpose of the scoping
meetings, as I said, is primarily to get your
thoughts on what our process is and what we
may be working on in the very near future. We
have a lot of people in our office in New
Orleans. Most of us are from the New Orleans
office. We have a lot of people who are going
to be working very hard and very long on the
Environmental Impact Statement and we would
like for everybody to give us as much of their
thoughts as they can.

One of the requirements of NEPA, of course, is consultations. On the outer-continental shelf the Bureau of Ocean Energy Management is one of the primary regulators of offshore oil and gas, but we're certainly not the only one. There are lots of other laws, as you can see up here, lots of other laws, lots of other agencies that we routinely

Page 7

consult with and work with fairly closely on different topics as we move through the NEPA process.

And now we get to the heart of the topic, the seismic surveys. The EIS that we're going to be evaluating, that we're going to be creating. We'll be evaluating seismic surveys in the Gulf of Mexico.

The seismic survey is a method of remotely looking at the sea floor to try and gather data on sea floor features, whether it's sub-sand, whether it's sand resources below the sea floor, or oil and gas resources that may be farther below the sea floor, these are the types of activities that we're looking for.

But beyond oil and gas we have other things that the seismic is used for. If you're looking to build a wind farm you need to know that you have a stable sea floor to put your pylons on and things like that. So it's used for alternative energy, it's used

Page 8

for marine minerals. If you want to rebuild a beach after a hurricane comes through you need to know where your sand sources are. So this EIS will look at a variety of actions. We'll look at a variety of ways that the seismic is used to support these different actions.

There are a bewildering number of types of surveys done for G&G. As you can imagine, depending on what the purpose of the survey is, whether it's shallow, just identifying sand sources, whether it's deep, whether it's a test that's performed down a bore hole or things like this, there are a number of different types of surveys, and we have lumped them into these rather broad categories here.

And the important things are, we need to define what our actions are in the areas that we're concerned with. And this is the area of interest that we're going to be looking at in the EIS, it's going to be the

1 | entire Gulf of Mexico.

When we did the Atlantic EIS for G&G we just did the mid-Atlantic planning area and the South Atlantic planning area. For this EIS we're doing the entire Gulf of Mexico.

The purpose of the programmatic EIS. We're writing what's known as a programmatic EIS, and what that means is that we're going to put together a document that has a broad discussion of a lot of different types of information that we can use in subsequent documents.

evaluate any site specific plans. That's not the purpose of this EIS. The purpose of this EIS is to go through, look at commonalities between the different types of procedures that may be used for G&G activities, write that down one time, and then from that point on subsequent documents that will be site specific, that will be plan specific, can use

that information and incorporate that information by reference. So once this document is done this document does not lead to permitted activity. There will be additional NEPA evaluations on all of these.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

BOEM and NMFS together have responsibilities on the outer-continental shelf, and we have sort of overlapping but non -- we don't compete with each other. But this is the language that's used for the environmental -- for the Marine Mammal Protection Act and Endangered Species Act and things like that. It gets real deep real quick. We have a couple of our NMFS folks in the audience. We appreciate you all coming out. And one of the things that we have to do is make sure that as we go through our environmental document we meet all of the requirements for our agency as well as for NMFS.

In the past, as we do these documents, we have a set of resources that we

resources that we're going to look at and we have routinely looked at in our EIS's: Costal environments; coastal and marine birds; socioeconomic; endangered species; marine mammal, fisheries; coastal tourism. All of these are resources that we will take the impacting factors, lay up against them for our analysis, and then come to a conclusion.

(Technical difficulties.)

MR. GOEKE: Well, while Beth is figuring that out -- thank you.

One of the key issues that we perform at the scoping process -- at the scoping part of the EIS process is the development of alternatives. Alternatives are the heart and soul of the EIS. As we're going through trying to figure out what our purpose and need is, what our resources are, what potential impacting factors -- one of the key elements to this entire this is, what are the alternatives that we're going to look at?

In an Environmental Impact

Statement an alternative can be almost anything that somebody can come up with that has the validity, that has the reasonableness to help achieve the purpose that's stated for the EIS.

And so this is one of the things that we're looking at now. For the EIS this is where we are. We know under CEQ, CEQ requires that we have a No Action alternative. CEQ requires that we have a Proposed Action. And the Proposed Action is something that is the heart of the purpose and the need in the document. But there are a lot of ways that Proposed Action can be accomplished.

And so what we need to do is to get -- and this is part of reason for this tour that we're doing right now. We need to go around, we need to get ideas from everybody about different types of alternatives, different types of mitigation measured, different types of things that can help us accomplish the protective measures that we

have to accomplish. So this is part of what we're hoping to receive from you and from everybody else over the next few days.

And, of course, one of the ways that we do our protection as we go through doing our analysis, we have been doing geological and geophysical in the Gulf of Mexico for quite a few years. As you know there's a strong oil and gas program that has been using the geophysical tools. Our agency has very actively been out there protecting and establishing protective measures that are known as "mitigations."

This is an example of some of the types of mitigations that our agency has used in the past. As you can see there a lot of different types of things that you can do, everything from ramp-up to inspections, from trained observers to minimum spaces between concurrent surveys so that the sounds don't overlap and become cumulative. There are a lot of different things that can be done to

1 effectively mitigate the offshore seismic.

This is another thing that we would like to get from everybody, is what type of mitigations, what additional protective measures can you-all think of that can help us achieve what it is we need to achieve in the Gulf.

And here's the schedule for the EIS. The EIS is a fairly ambitious EIS, and there are a lot of things that we have to do in our coordination with NMFS and our coordination with other federal and state agencies and with non-governmental entities and things like this. This EIS is going to take a couple years for us to bring to completion.

The red lettering are places where the EIS is open -- our process is open to comment and open to input from folks outside of our agency. We are at the Notice of Intent and the Scoping Meetings now, but we will have a Comment Period when the Draft document is

published. There is a Comment Period on the Final EIS when it's published as well.

is, we're going to take the information that we gather from you and from the rest of our meetings over the next few days, we'll write a Draft document, we will publish a Draft document, and then we will come back here, and very likely this exact same place, and hopefully you-all will have read the Draft document and can give us some feedback and some thoughts on how the Draft document can be improved and we can move forward with the program or things like this.

So what we're going to do, the process here tonight is, we're going to set up -- we have a station set up here, a microphone. We have a court reporter over here who will take verbatim notes from everything's that said so that we don't have to try and interpret anything that anyone suggests, we have the verbatim notes.

Page 17

And at this point we had asked everybody to sign in when you came in.

There's a couple different reasons for that.

We're not trying to track anybody. We're not the IRS, we don't track people. But we do have a mail list, and if you want to be on our mail list, this is partly how we do it.

And one of the things that we had asked when you signed in was if you wanted to speak. Okay. So we have three speakers who have self identified. And the first speaker is Eddie Pharr. Come on up, Eddie.

Let me give you an idea of what
we're going to do. Come on. What we're going
to do is, we're going to go through our three
speakers, ask if anybody else has any
thoughts. Once we've exhausted everybody's
thoughts and comments we'll take a 15-minute
break. If you want to hang around, that's
fine. If you don't want to hang around and
you've said your piece, you're free to go.

Neal R. Gross & Co., Inc. 202-234-4433

Mr. Pharr.

Page 18

MR. PHARR: Thanks Gary, Beth. My name is Eddie Pharr, I'm here with the IAGC, and here today representing the International Association of Geophysical Contractors. And on behalf of the IAGC and the geophysical industry I wish to express our appreciation for the opportunity to make the following comments, which will be supplemented by written comments to the BOEM regarding the development of the PEIS for G&G activities in the Gulf of Mexico.

association representing the industry that provides geophysical acquisition processing and other services to the energy industry, including both the conventional and renewable energy sectors. IAGC member companies play an integral role in the successful exploration and development of offshore oil and natural gas resources through the acquisition processing of geophysical data.

Geophysical surveys are key tools

used in oil and natural gas exploration and
siting of renewable energy facilities.
Geophysical data is critical to the successful

discovery and efficient development and production of oil and natural gas.

Over the past few decades advances in modern seismic imaging and interpretation have been tremendous. Today seismic surveys use the modern data acquisition and processing techniques and are able to produce subsurface images much clearer and more accurate than those of even five years ago.

Geophysical data is all critical for the development of renewable energies.

High resolution geophysical data and geotechnical borings provide important key data required to site renewable energy facilities and design the foundational structures that we require for development of renewable energy.

The IAGC values the stakeholder process and we are committed to participating

Page 20

in the dialogue with all stakeholders to explain what we do, why we do it, and the measures we take to protect the environment.

We have with us today several educational items that explain modern marine geophysical data acquisition, underwater sound, and the measures the geophysical industry implements to ensure minimal impacts of our operations on the environment. This information is available for BOEM and those in attendance in the back of the room.

IAGC wishes again to express our appreciation for this opportunity to voice our support for the commitment to work with BOEM and all stakeholders in the development of the Gulf of Mexico EIS. Thank you again.

MR. GOEKE: Thank you, Mr. Pharr.

The next speaker who signed up is Christopher Dougherty.

MR. DOUGHERTY: I'm with Chis Dougherty, I'm with Coastal Planning and Engineering.

1 MR. GOEKE: Okay.

MR. DOUGHERTY: My comment will be brief. I don't have really a prepared statement other than just a comment. We hope that the scope of the PEIS would differentiate between high resolution low decibel, you know, low power systems like CHIRP systems, and then high decibel, high energy systems like air guns.

CHIRP systems are used for public benefit projects, such as shore protection, beach (sic) or nourishment, projects like that. If all of these systems are lumped together, projects like that, you know, might not be able to take place. So there just needs to be a differentiation between these CHIRP systems and air gun systems in the scope.

MR. GOEKE: Chris, can you tell us who you're with?

MR. DOUGHERTY: I'm with Coastal Planning and Engineering.

	Page 22
1	MR. GOEKE: Okay, thank you.
2	All right. The next speaker who
3	signed up is David Mica. Mr. Mica.
4	MR. MICA: Good afternoon, Mr.
5	Goeke, Ms. Nord. I am David Mica, I'm the
6	Executive Director of the Florida Petroleum
7	Council located in Tallahassee. We're a
8	division of the American Petroleum Institute
9	based in Washington.
10	Welcome back to the Sunshine
11	State. It's nice to see you.
12	MR. GOEKE: Thank you.
13	MR. MICA: Thanks for the
14	opportunity to speak today about the scoping
15	of this Draft Programmatic Environmental
16	Impact Statement which will support the
17	issuance of permits to conduct geological and
18	geophysical study activities in the Gulf of
19	Mexico.
20	The oil and natural gas industry
21	has a long history of working with the

Department of the Interior to develop this

22

country's natural resources to the benefit of the United States economy and to all Americans. Our industry stands ready to invest in additional exploration of the Gulf of Mexico.

This DPEIS is needed as a first step to begin the process of generating the data that will allow for additional production in the Central and Western Gulf, and the potential for future discoveries in the Eastern Gulf, should that area be made available for leasing and development sometime in the future.

The scope and the magnitude of the economic activity in the Gulf of Mexico are huge, and largely attributable to the energy exploration and development that we currently have. Currently in the Gulf of Mexico it accounts for over 25 percent of all of the United States domestic oil production. The BOEM has determined that over a 40-year period the leasing, drilling, and production

resulting from the 2012 to 2017 five-year OCS leasing plan, will create an additional 20,000, 25, to 51,825 jobs, and between 1.1 and 2.2 billion in additional annual income.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

To realize these benefits geological and geophysical surveys, as we're talking about tonight, mainly in the form of seismic surveying will be necessary. offshore oil and natural gas exploration requires the use of seismic surveys to feasibly and accurately prospect for oil and natural gas reserves offshore. This technology has been used for decades to assess the location and size of potential and natural gas deposits which often lay several miles beneath the ocean floor. Seismic surveys also make offshore energy production safer and more efficient by greatly reducing the footprint and the drilling of dry holes where no oil and gas is found to be present.

The offshore oil and natural gas industry has demonstrated the ability to

manner that protects marine life. Four decades or worldwide seismic surveying activity and scientific research on marine mammals have shown no evidence that sound from seismic activities has resulted in injury to any marine mammal species. Likewise, there's no scientific evidence demonstrating biologically significant adverse impacts on marine mammal populations.

Nevertheless, our industry employs a number of robust mitigation measures to further reduce the negligible risk of harm to marine mammals. Based on the absence of observed affects and supporting scientific knowledge, the alternative studied in the PEIS should not consider overly restrictive mitigation measures that will inhibit our industry from performing seismic surveys and BOEM from meeting its goal set out in the OCS Lands Act.

An agency's only NEPA obligation

is to evaluate reasonable alternatives, and a proposed alternative is reasonable only if it will bring about the ends of the federal action measured by whether it achieves the goals the agency sets out to achieve. And that's from the OCS Lands Act.

eliminate alternatives and mitigation measures that do not meet the purposes and needs of the project. In the face of no observable injury or mortality data, and no population level of behavioral effect, the DPEIS should resist the imposition of more and more unreasonable mitigation measures, especially the addition of dolphins, which at times intentionally approach seismic vessels to bow ride in a seemingly normal behavior pattern, to the list of animals that require operations to shut down.

In the past the methodology BOEM has used to estimate the number of incidental takes has resulted in what we feel are highly

exaggerated estimates, especially considering the lack of any observable injuries, mortalities, or population level behavioral BOEM has relied on models that have effects. not been validated against field data. And this has created unrealistic estimates of incidental takes that could be expected to occur during industry geological and geophysical activities. Compounding this problem are the agency's previous take number estimates which are only achievable by using acoustic threshold criteria based on obsolete data that does not meet the NEPA requirements to use the best available science.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

Industry's highlighted a varies of mythological flaws where the Agency's choices in acoustic propagation models, the use of frequency weighting, and acoustic thresholds, can result in differences in take estimates that vary by several orders of magnitude.

In addition, the primary emphasis in the DPEIS when considering any projected

disturbance or impact should be its
environmental context, the acoustic and
physical attributes surrounding environment
and the effected species themselves.

Therefore, we strongly believe
that the DPEIS must be based on the best
available science, make appropriate use of
models to estimate incidental takes, and fully
consider the environmental context when making
any determination of environmental
consequences.

Finally, we feel that the DPEIS
must explicitly address the OCS Lands Act's
programmatic goal of ensuring the expedited
exploration and development of the outercontinental shelf, and that the DPEIS fully
address and quantify the potential
interference with the achievement of that goal
posed by any alternative or mitigation measure
being considered.

For example, if the DPEIS addresses the potential for extending shutdown

requirements to mammals other than whales and manatees, or expanding the shut-down zone from the current 500 meters, BOEM needs to quantify the number of hours or shut down that would result, and the implications for the efficacy and timeliness of the seismic survey.

We appreciate the opportunity to provide this public statement and will be submitting additional written comments before the comment deadline occurs. Thank you.

MR. GOEKE: Thank you.

Cathy Harrelson.

MS. HARRELSON: Good evening. I'm Cathy Harrelson, I'm the Florida organizer for Gulf Restoration Network. GRN is based in New Orleans but I live here in St. Petersburg. We also will be submitting written comments, but I did want to make a few comments here.

Gulf Restoration Network is a network of local, regional, and national environmental social justice and public interest groups and individuals dedicated to

empowering people to protect and restore the ecological and biological integrity of the Gulf of Mexico.

Network members hail from each of the Gulf states, of Alabama, Florida,
Louisiana, Mississippi and Texas, and beyond.
Gulf Restoration Network is deeply concerned about the potential environmental impacts of seismic exploration on the resources of the Gulf of Mexico. Accordingly, the GRN would assert that the following topic issues must be addressed within the Environmental Impact Statement.

Number one. Consider within its alternatives analysis all potentially available alternative technologies that would allow exploration for oil and gas reserves at different sound levels than those used by seismic technologies currently employed by the industry. And I do want to caveat that. That that is within the currently allowed areas and continuing to protect the Eastern Gulf from

1 drilling through GOMESA.

Number two. The impacts of all aspects of the process of seismic exploration on protected species including but not limited to, birds, marine mammals, turtles and fish species, in the geographic area covered by the EIS.

Number three. The additive effect of continuing seismic exploration on species impacted by the BP Oil disaster of 2010.

Number four. The effectiveness of current mitigation measures in reducing the threat to protect its species and additional reductions in impact that could be achieved by use of alternative measures, such as passive acoustic monitoring and the like.

And, number five, the indirect secondary and cumulative impacts on the marine environment of all activities of the oil and gas industry, and the geographic area covered by the EIS.

Cumulative impact analysis must

include a review of the overall impacts of seismic in addition to an estimated potential removal of 100 or more structures per year and the totality of removal of all structures presently reaching the end of their useful life over the period covered by the EIS.

Moreover, cumulative impact
analysis must look at the totality of impacts
on the marine environment associated with oil
and gas exploration and development activities
i.e. seismic exploration, and non-BOEM
regulated activities, like marine,
transportation, fishing, et cetera.

I really appreciate this opportunity, and as I say, we will be filing additional written comments. Thank you.

MR. GOEKE: Great. Thank you very much. We appreciate you coming out.

MS. HARRELSON: Sure.

MR. GOEKE: Is there anyone who has not spoken that would like to address the group now?

Page 33

Yes, sir. Give us your name and your affiliation, please.

MR. HINE: Sure. My name is Al
Hine. I'm a Professor of Marine Science at
the University of South Florida. I teach
marine geophysics, I do a lot of marine
geophysics. I've done a lot of marine
geophysics on the West Florida shelf, high
resolution. So I'm quite familiar with marine
geology and geophysics, that's my job.

I'm curious about this whole process. I mean we've been extracting oil and gas and sand and gravel from the Gulf of Mexico for a hundred years, and as we speak there are a flotilla of seismic vessels out there right now collecting data, both 2-D and 3-D, right up to state waters in Florida in the Eastern Gulf.

So what does this process -- and you say this won't be completed for a couple of years? A couple of years is going to be an enormous amount of continued seismic

reflection and seismic refraction, and whatever other types of geophysical data collected. So I'm curious as to the point of this.

Since so much work has been done the Gulf of Mexico is one of the three megaprovinces of hydrocarbons in the world. It's not going to go away. There's an enormous amount of oil and gas out there. We're going to be dependent upon oil and gas for a long period of time. And the industry has made an enormous investment for sure in the infrastructure in continuing seismic reflection work. And as one gentleman said, the technology's improved enormously.

So I guess, what's the point of all this right now? Why is this going on?

MR. GOEKE: I think that's a good question. The purpose of the meeting tonight is to gather thoughts on what the things are that we should look at in the EIS.

During the break let's come talk

to you. We'll talk off the record. I've got

people with us that can answer the question,

but that's not what this meeting is about.

Is there anyone else that would like to address the EIS preparation?

(No response.)

MR. GOEKE: If not, we're going to adjourn for 15 minutes, and if you hang around I'm going to open the floor once again.

MS. NORD: Did you show them the slides about -- the comment slides?

MR. GOEKE: No.

We have numerous ways for you to give comments into our process. You can go to our website on our Agency's site, you can go to regulations.gov, you can go to G&G.gov.

MS. NORD: There you go, right there.

MR. GOEKE: gomggeis@boem.gov.

There are a lot of different ways you can give comments to us. Some of them are easier than others, some people are more comfortable just

	Page 37
1	discovers something that they feel passionate
2	about that they need to say, we give them a
3	second chance to do that.
4	So, is there anyone in the
5	audience that felt like there was something
6	that was not said before and they need to
7	speak up?
8	(No response.)
9	MR. GOEKE: Seeing nothing, we're
10	adjourned. Thank you. Thank you all for
11	coming out.
12	(At 7:27 p.m., meeting adjourned.)
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	

A
abbreviated 4:12
ability 24:22
able 19:10 21:15
absence 25:14
accomplish 13:22
14:1
accomplished
13:14
accounts 23:19
accurate 19:11
accurately 24:11
achievable 27:11
achieve 13:4 15:6,6
26:5
achieved 31:14
achievement 28:18
achieves 26:4
acoustic 27:12,17
27:18 28:2 31:16
acquisition 18:14
18:20 19:9 20:6
Act 4:12 10:12,12
25:21 26:6
action 13:9,10,11
13:14 26:4
actions 8:4,7,19
actively 14:11
activities 1:8 3:22
4:17 7:15 9:19
18:10 22:18 25:1
25:6 27:9 31:19
32:10,12
activity 10:4 23:15
25:4
Act's 28:13
addition 26:14
27:21 32:2
additional 10:5
15:4 23:4,8 24:2,4
29:9 31:13 32:16
additive 31:8
address 5:9 28:13
28:17 32:21 35:5
addressed 30:12
addresses 28:22
adjourn 35:8

adjourned 37:10
37:12
ADMINISTRAT
1:4
advances 19:6
adverse 25:9
affiliation 33:2
afternoon 22:4
agencies 4:4,6,9,20
6:1,22 15:13
agency 4:7 5:20
10:19 14:10,15
15:20 26:5,7
agency's 25:22
27:10,16 35:15
ago 19:12
ahead 36:12
air 21:8,17
Al 2:17 33:3
Alabama 30:5
allow 23:8 30:17
allowed 30:21
allows 4:13
alternative 7:22
13:1,9 25:16 26:2
28:19 30:16 31:15
alternatives 12:15
12:15,21 13:19
26:1,8 30:15
ambitious 15:9
American 22:8
Americans 23:3
amount 33:22 34:9
analysis 12:8 14:6
30:15 31:22 32:8
analyze 11:18
animals 26:18
annual 24:4
answer 35:2
anybody 17:4,16
36:21
Anyway 3:16
appreciate 10:15
29:7 32:14,18
appreciation 18:6
20:13
approach 26:16

annuanuiata 20:7
appropriate 28:7
area 8:21 9:3,4
23:11 31:6,20
areas 8:20 30:21
aside 11:8
asked 17:1,9
aspects 31:3
assert 30:11
assess 24:13
Assessment 1:21
3:5
associated 32:9
association 18:4,13
Atlantic 9:2,4
ATMOSPHERIC
1:3
attendance 20:11
attributable 23:16
attributes 28:3
audience 10:15
36:14,17 37:5
available 20:10
23:12 27:14 28:7
30:16

30.10
В
back 16:8 20:11
22:10 36:11,13,15
36:18
based 22:9 25:14
27:12 28:6 29:15
beach 8:2 21:12
bear 3:12
beginning 6:2
behalf 18:5
behavior 26:17
behavioral 26:12
27:3
believe 28:5
beneath 24:16
benefit 21:11 23:1
benefits 24:5
best 27:14 28:6
Beth 1:22 3:7,8,16
12:10 18:1
bewildering 8:8
beyond 7:17 30:6

billion 24:4
biological 30:2
biologically 25:9
birds 12:3 31:5
BOEM 1:21 10:6
18:9 20:10,14
23:21 25:20 26:20
27:4 29:3
bore 8:14
borings 19:16
bow 26:16
BP 31:10
break 17:19 34:22
36:22
brief 21:3
bring 15:15 26:3
broad 8:16 9:11
11:3
build 7:19
Bureau 1:2 3:6,18
4:2 6:17

C
C 3:1
categories 8:17
Cathy 2:16 29:12
29:14
caveat 30:20
Central 23:9
CEQ 5:20,21 13:8
13:8,10
certainly 6:19
cetera 32:13
chance 37:3
Chief 1:21 3:4
CHIRP 21:7,10,17
Chis 20:20
choices 27:16
Chris 21:19
Christopher 2:13
20:19
city 5:7
clearer 19:11
closely 7:1
coastal 12:3,5
20:21 21:21
collected 34:3

collecting 33:16 come 12:8 13:2 16:8 17:12,14 34:22 comes 8:2 36:21 comfortable 35:22 **coming** 10:15 32:18 37:11 **comment** 15:19,22 16:1 21:2,4 29:10 35:11 **comments** 5:6 6:1 17:18 18:8,9 29:9 29:17,18 32:16 35:14,21 Commerce 4:6 commitment 20:14 committed 19:22 commonalities 9:17 companies 18:17 compete 10:9 completed 33:20 completion 15:16 **Compounding** 27:9 concerned 8:20 30:7 conclusion 12:8 concurrent 14:20 **conduct** 22:17 25:1 consequences 28:11 consider 25:17 28:9 30:14 considered 28:20 considering 27:1 27:22 consult 7:1 consultations 6:16 contact 36:7 **context** 28:2,9 continental 6:17 28:16 continued 33:22 continuing 30:22 31:9 34:13 Contractors 18:4

convened 1:18 conventional 18:16 coordinate 4:14 coordination 4:20 15:11.12 Coordinator 1:22 **Coordinators** 3:8 Costal 12:2 Council 5:20 22:7 country's 23:1 **couple** 10:14 15:15 17:3 33:20.21 **course** 6:16 14:4 36:5 **court** 16:18 **covered** 31:6,20 32:6 co-agencies 3:19 create 24:2 created 27:6 creating 7:7 criteria 27:12 **critical** 19:3,13 cumulative 14:21 31:18,22 32:7 **curious** 33:11 34:3 **current** 29:3 31:12 **currently** 23:17,18 30:19,21 D **D** 3:1 data 7:11 18:21 19:3,9,13,15,17 20:6 23:8 26:11 27:5.13 33:16

34:2

David 2:14 22:3,5 days 14:3 16:6 deadline 29:10

decades 19:6 24:13 25:3

decibel 21:6.8 decided 3:19 dedicated 29:22

deep 8:12 10:13

deeply 30:7

define 8:19 demonstrated 24:22

demonstrating 25:8

Department 1:1 4:4,6 22:22 dependent 34:10

depending 8:10 deposits 24:15

design 19:18 detail 5:17

detailed 4:15 determination

28:10 determined 23:21

develop 22:22 development 12:15

18:10,19 19:4,14 19:19 20:15 23:12

23:17 28:15 32:10 dialogue 20:1

differences 27:19 **different** 7:2 8:6,15

9:11,18 13:19,20 13:21 14:17,22

17:3 30:18 35:20 differentiate 21:5

differentiation 21:16

difficulties 3:13 12:9

digging 36:2 **Director** 22:6

disaster 31:10 discoveries 23:10

discovers 37:1 discovery 19:4

discussion 9:11

disturbance 28:1 division 22:8

document 3:9 4:8 9:10 10:3,3,18

11:7 13:13 15:22 16:7,8,11,12

documents 9:13.21 10:22

early 5:4,22 **easier** 35:21 Eastern 1:19 23:11 30:22 33:18

doing 9:5 11:19

dolphins 26:15

domestic 23:20

Dougherty 2:13

21:21

28:21

13:17 14:6.6 16:3

20:19,20,21 21:2

27:22 28:6,12,16

DPEIS 23:6 26:12

Draft 15:22 16:7.7

16:10,12 22:15

 \mathbf{E}

drilling 23:22

24:19 31:1

dry 24:19

E 3:1,1

ecological 30:2 economic 23:15 economy 23:2

Eddie 2:12 17:12 17:12 18:2

educational 20:5 **effect** 26:12 31:8

effected 28:4

effectively 15:1 effectiveness 31:11 effects 11:16 27:4

efficacy 29:6

efficient 19:4 24:18 **EIS** 1:8 3:21 5:9.12

5:17,18 7:5 8:4,22 9:2,5,8,9,14,16,17

12:14,16 13:5,7

15:9,9,9,14,18 16:2 20:16 31:7

31:21 32:6 34:21 35:5

EIS's 12:2

elements 12:20 eliminate 26:8

emphasis 27:21

employed 30:19 **employs** 25:11

empowering 30:1 endangered 10:12 12:4

ends 26:3

energies 19:14 **energy** 1:2 3:6,18

4:2 6:17 7:22 18:15,17 19:2,17

19:20 21:8 23:16 24:17

Engineering 20:22 21:22

enormous 33:22 34:8.12

enormously 34:15 ensure 20:8

ensuring 28:14 entire 9:1.5 12:20

entities 15:13 environment 1:21

5:4 20:3,9 28:3 31:19 32:9

environmental 1:8 3:5 4:11.13.16 5:9

5:21 6:12 10:11 10:18 12:22 22:15

28:2,9,10 29:21 30:8.12

environments 12:3 especially 26:14

27:1 establishes 5:21

establishing 14:12 **estimate** 26:21 28:8

estimated 32:2 **estimates** 27:1,6,11

27:19 et 32:13

evaluate 9:15 11:7 26:1

evaluating 7:6,7 evaluation 11:1 evaluations 10:5 evening 3:3,7,10,18

29:13

everybody 6:13 13:18 14:3 15:3

17:2 everybody's 17:17 everything's 16:20 evidence 25:5,8

exact 16:9 exaggerated 27:1 examinations 4:15

examine 5:17 example 14:14

28:21

Executive 22:6 exhausted 17:17 expanding 29:2

expected 27:7 expedited 28:14

explain 20:2,5 explicitly 28:13

exploration 18:18 19:1 23:4,17 24:9

25:1 28:15 30:9 30:17 31:3,9

32:10.11 **express** 18:6 20:12 extending 28:22

extracting 33:12 e-mail 36:1

face 26:10 facilities 19:2,18 **factors** 11:3,5,16 12:7.19

fairly 7:1 11:3 15:9 familiar 33:9

farm 7:19 farther 7:14

feasibly 24:11 features 7:11

federal 4:14,17,20 5:22 15:12 26:3,7

feedback 16:11 feel 26:22 28:12 37:1

felt 37:5

figure 5:14 12:17	34:20	4:17	holes 24:19	20:8 22:20 23:3
figuring 12:11	generating 23:7	governments 5:7	hope 21:4	24:22 25:11,19
filing 32:15	gentleman 34:14	grandfather 4:13	hopefully 16:10	27:8 30:20 31:20
Final 16:2	geographic 31:6,20	gravel 33:13	hoping 14:2	34:11
Final 10.2 Finally 28:12	geological 1:7 3:21	Great 32:17	hours 29:4	Industry's 27:15
fine 17:20	5:11 14:7 22:17	greatly 24:18	huge 23:16	information 9:12
first 17:11 23:6	24:6 27:8	GRN 29:15 30:10	hundred 33:14	10:1,2 16:4 20:10
fish 31:5	geology 33:10	group 32:22	hurricane 8:2	infrastructure
fisheries 1:5 3:20	geophysical 1:7	groups 29:22	hydrocarbons 34:7	34:13
12:5	3:22 5:11 14:7,10	guess 34:16		inhibit 25:18
fishing 32:13	18:4,5,14,21,22	Gulf 1:7 3:22 7:8	I	injuries 27:2
five 19:12 31:17	19:3,13,15 20:6,7	9:1,5 11:1,4,6	IAGC 18:2,5,12,17	injury 25:6 26:10
five-year 24:1	22:18 24:6 27:9	14:7 15:7 18:11	19:21 20:12	input 15:19
flaws 27:16	34:2	20:16 22:18 23:4	idea 17:13	inspections 14:18
floor 7:10,11,13,14	geophysics 33:6,7,8	23:9,11,15,18	ideas 5:10 13:18	instance 9:14
7:20 24:16 35:9	33:10	29:15,19 30:3,5,7	identified 17:11	Institute 22:8
Florida 1:15 22:6	geotechnical 19:16	30:10,22 33:13,18	identifying 8:12	integral 18:18
29:14 30:5 33:5,8	give 5:7 6:13 16:11	34:6	images 19:11	integrity 30:2
33:17	17:13 33:1 35:14	gun 21:17	imagine 8:10	Intent 15:20
flotilla 33:15	35:20 36:20 37:2	guns 21:9	imaging 19:7	intentionally 26:15
folks 3:17 10:14	go 9:17 10:17 11:6	G&G 1:8 8:9 9:3	impact 1:8 5:4 6:12	interest 8:21 29:22
15:19	11:12,14 13:18	9:19 18:10	11:2,9,15 12:22	interested 6:2
following 18:7	14:5 17:15,21	G&G.gov 35:16	22:16 28:1 30:12	interference 28:18
30:11	34:8 35:14,15,16		31:14,22 32:7	Interior 1:1 4:5
footprint 24:18	35:17 36:8,12,12	Н	impacted 31:10	22:22
form 24:7	goal 25:20 28:14,18	hail 30:4	impacting 11:5	international 18:3
forward 16:13	goals 26:5	hang 3:12 17:19,20	12:7,19	18:12
found 24:20	Goeke 1:19,21 3:3	35:8	impacts 4:16 20:8	interpret 16:21
foundational 19:18	3:4,14 11:22	happen 11:4	25:9 30:8 31:2,18	interpretation 19:7
four 25:2 31:11	12:10 20:17 21:1	hard 6:11	32:1,8	invest 23:4
free 17:21	21:19 22:1,5,12	harm 25:13	implements 20:8	investment 34:12
frequency 27:18	29:11 32:17,20	Harrelson 2:16	implications 29:5	involves 4:22
fully 28:8,16	34:18 35:7,12,19	29:12,13,14 32:19	important 5:15,16	IRS 17:5
further 25:13	36:12,15,18 37:9	hear 5:12	8:18 19:16	issuance 22:17
future 6:7 23:10,13	going 6:10 7:6,6	hearings 5:1	imposition 26:13	issues 5:8,15,16
G	8:21,22 9:10 12:1	heart 7:4 12:16 13:12	improved 16:13 34:15	12:12 30:11
$\overline{\mathbf{G}}$ 3:1	12:16,21 15:14	help 5:3,5 13:4,21	incidental 26:21	items 20:5
Gary 1:19,21 3:4	16:3,4,15,16	15:5	27:7 28:8	i.e 32:11
18:1	17:14,14,15 33:21	high 19:15 21:6,8,8	include 32:1	-
gas 6:19 7:13,17	34:8,9,17 35:7,9	33:8	include 32.1	job 33:10
14:9 18:20 19:1,5	36:1,8	highlighted 27:15	31:4	jobs 24:3
22:20 24:9,12,15	GOMESA 31:1 gomggeis@boem	highly 26:22	income 24:4	JUNE 1:13
24:20,21 30:17	35:19	Hine 2:17 33:3,4	incorporate 10:1	justice 29:21
31:20 32:10 33:13	good 3:3 22:4 29:13	history 22:21	indirect 31:17	
34:9,10	34:18	hitting 11:21	individuals 29:22	K
gather 7:11 16:5	Government 4:14	hole 8:14	industry 18:6,13,15	key 12:12,19 18:22
	GOVERNMENT.17			19:16
	<u> </u>	<u> </u>	<u> </u>	

knowledge 25:16 known 5:20 9:8 14:13 L lack 27:2 Lands 25:21 26:6 28:13 language 10:10 largely 23:16 late 36:21 law 4:13,19 laws 6:20,21 lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	M nagnitude 23:14 27:20 nail 17:6,7 naking 28:9 nammal 10:11 12:5 25:7,10 nammals 11:10 25:5,14 29:1 31:5 Management 1:2 3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	22:19 23:5,15,18 30:3,10 33:14 34:6 Mica 2:14 22:3,3,4 22:5,13 microphone 16:18 mid-Atlantic 9:3 miles 24:15 minerals 8:1 minimal 20:8 minimum 14:19 minutes 35:8 36:9 Mississippi 30:6 mitigate 15:1 mitigation 13:20 25:12,18 26:8,14 28:19 31:12	15:6 37:2,6 needed 23:6 needs 21:16 26:9 29:3 negligible 25:13 NEPA 1:22 3:8 4:12,12,19 6:15 7:2 10:5 25:22 27:13 network 29:15,19 29:20 30:4,7 Nevertheless 25:11 New 3:6 6:8,9 29:15 NGO's 5:6 nice 22:11 NMFS 1:21 4:5	ocean 1:2 3:6,18 4:2 6:17 24:16 OCEANIC 1:3 OCS 24:1 25:20 26:6 28:13 office 6:8,10 offshore 6:19 15:1 18:19 24:9,12,17 24:21 oil 6:19 7:13,17 14:9 18:19 19:1,5 22:20 23:20 24:9 24:11,19,21 30:17 31:10,19 32:9 33:12 34:9,10 Okay 11:22 17:10
known 5:20 9:8 14:13 L lack 27:2 Lands 25:21 26:6 28:13 language 10:10 largely 23:16 late 36:21 law 4:13,19 laws 6:20,21 lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	M nagnitude 23:14 27:20 nail 17:6,7 naking 28:9 nammal 10:11 12:5 25:7,10 nammals 11:10 25:5,14 29:1 31:5 Management 1:2 3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	30:3,10 33:14 34:6 Mica 2:14 22:3,3,4 22:5,13 microphone 16:18 mid-Atlantic 9:3 miles 24:15 minerals 8:1 minimal 20:8 minimum 14:19 minutes 35:8 36:9 Mississippi 30:6 mitigate 15:1 mitigation 13:20 25:12,18 26:8,14	29:3 negligible 25:13 NEPA 1:22 3:8 4:12,12,19 6:15 7:2 10:5 25:22 27:13 network 29:15,19 29:20 30:4,7 Nevertheless 25:11 New 3:6 6:8,9 29:15 NGO's 5:6 nice 22:11	OCS 24:1 25:20 26:6 28:13 office 6:8,10 offshore 6:19 15:1 18:19 24:9,12,17 24:21 oil 6:19 7:13,17 14:9 18:19 19:1,5 22:20 23:20 24:9 24:11,19,21 30:17 31:10,19 32:9 33:12 34:9,10 Okay 11:22 17:10
known 5:20 9:8 14:13 L lack 27:2 Lands 25:21 26:6 28:13 language 10:10 largely 23:16 late 36:21 law 4:13,19 laws 6:20,21 lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	M nagnitude 23:14 27:20 nail 17:6,7 naking 28:9 nammal 10:11 12:5 25:7,10 nammals 11:10 25:5,14 29:1 31:5 Management 1:2 3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	34:6 Mica 2:14 22:3,3,4 22:5,13 microphone 16:18 mid-Atlantic 9:3 miles 24:15 minerals 8:1 minimal 20:8 minimum 14:19 minutes 35:8 36:9 Mississippi 30:6 mitigate 15:1 mitigation 13:20 25:12,18 26:8,14	negligible 25:13 NEPA 1:22 3:8 4:12,12,19 6:15 7:2 10:5 25:22 27:13 network 29:15,19 29:20 30:4,7 Nevertheless 25:11 New 3:6 6:8,9 29:15 NGO's 5:6 nice 22:11	26:6 28:13 office 6:8,10 offshore 6:19 15:1 18:19 24:9,12,17 24:21 oil 6:19 7:13,17 14:9 18:19 19:1,5 22:20 23:20 24:9 24:11,19,21 30:17 31:10,19 32:9 33:12 34:9,10 Okay 11:22 17:10
L lack 27:2 m Lands 25:21 26:6 m 28:13 language 10:10 largely 23:16 late 36:21 law 4:13,19 laws 6:20,21 lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6 m m // Amm / Am	nagnitude 23:14 27:20 nail 17:6,7 naking 28:9 nammal 10:11 12:5 25:7,10 nammals 11:10 25:5,14 29:1 31:5 Management 1:2 3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	22:5,13 microphone 16:18 mid-Atlantic 9:3 miles 24:15 minerals 8:1 minimal 20:8 minimum 14:19 minutes 35:8 36:9 Mississippi 30:6 mitigate 15:1 mitigation 13:20 25:12,18 26:8,14	NEPA 1:22 3:8 4:12,12,19 6:15 7:2 10:5 25:22 27:13 network 29:15,19 29:20 30:4,7 Nevertheless 25:11 New 3:6 6:8,9 29:15 NGO's 5:6 nice 22:11	office 6:8,10 offshore 6:19 15:1 18:19 24:9,12,17 24:21 oil 6:19 7:13,17 14:9 18:19 19:1,5 22:20 23:20 24:9 24:11,19,21 30:17 31:10,19 32:9 33:12 34:9,10 Okay 11:22 17:10
L lack 27:2 m Lands 25:21 26:6 m 28:13 m language 10:10 largely 23:16 late 36:21 law 4:13,19 laws 6:20,21 lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6 m	27:20 nail 17:6,7 naking 28:9 nammal 10:11 12:5 25:7,10 nammals 11:10 25:5,14 29:1 31:5 fanagement 1:2 3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	22:5,13 microphone 16:18 mid-Atlantic 9:3 miles 24:15 minerals 8:1 minimal 20:8 minimum 14:19 minutes 35:8 36:9 Mississippi 30:6 mitigate 15:1 mitigation 13:20 25:12,18 26:8,14	NEPA 1:22 3:8 4:12,12,19 6:15 7:2 10:5 25:22 27:13 network 29:15,19 29:20 30:4,7 Nevertheless 25:11 New 3:6 6:8,9 29:15 NGO's 5:6 nice 22:11	offshore 6:19 15:1 18:19 24:9,12,17 24:21 oil 6:19 7:13,17 14:9 18:19 19:1,5 22:20 23:20 24:9 24:11,19,21 30:17 31:10,19 32:9 33:12 34:9,10 Okay 11:22 17:10
lack 27:2 Lands 25:21 26:6 28:13 language 10:10 largely 23:16 late 36:21 law 4:13,19 laws 6:20,21 lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	nail 17:6,7 naking 28:9 nammal 10:11 12:5 25:7,10 nammals 11:10 25:5,14 29:1 31:5 flanagement 1:2 3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	mid-Atlantic 9:3 miles 24:15 minerals 8:1 minimal 20:8 minimum 14:19 minutes 35:8 36:9 Mississippi 30:6 mitigate 15:1 mitigation 13:20 25:12,18 26:8,14	7:2 10:5 25:22 27:13 network 29:15,19 29:20 30:4,7 Nevertheless 25:11 New 3:6 6:8,9 29:15 NGO's 5:6 nice 22:11	18:19 24:9,12,17 24:21 oil 6:19 7:13,17 14:9 18:19 19:1,5 22:20 23:20 24:9 24:11,19,21 30:17 31:10,19 32:9 33:12 34:9,10 Okay 11:22 17:10
Lands 25:21 26:6 28:13 language 10:10 largely 23:16 late 36:21 law 4:13,19 laws 6:20,21 lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	naking 28:9 nammal 10:11 12:5 25:7,10 nammals 11:10 25:5,14 29:1 31:5 Management 1:2 3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	miles 24:15 minerals 8:1 minimal 20:8 minimum 14:19 minutes 35:8 36:9 Mississippi 30:6 mitigate 15:1 mitigation 13:20 25:12,18 26:8,14	27:13 network 29:15,19 29:20 30:4,7 Nevertheless 25:11 New 3:6 6:8,9 29:15 NGO's 5:6 nice 22:11	24:21 oil 6:19 7:13,17 14:9 18:19 19:1,5 22:20 23:20 24:9 24:11,19,21 30:17 31:10,19 32:9 33:12 34:9,10 Okay 11:22 17:10
28:13 m language 10:10 largely 23:16 m late 36:21 M law 4:13,19 M laws 6:20,21 m lay 12:7 24:15 m lead 10:3 m leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6 m	nammal 10:11 12:5 25:7,10 nammals 11:10 25:5,14 29:1 31:5 Management 1:2 3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	minerals 8:1 minimal 20:8 minimum 14:19 minutes 35:8 36:9 Mississippi 30:6 mitigate 15:1 mitigation 13:20 25:12,18 26:8,14	network 29:15,19 29:20 30:4,7 Nevertheless 25:11 New 3:6 6:8,9 29:15 NGO's 5:6 nice 22:11	oil 6:19 7:13,17 14:9 18:19 19:1,5 22:20 23:20 24:9 24:11,19,21 30:17 31:10,19 32:9 33:12 34:9,10 Okay 11:22 17:10
language 10:10 largely 23:16 late 36:21 law 4:13,19 laws 6:20,21 lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	12:5 25:7,10 nammals 11:10 25:5,14 29:1 31:5 fanagement 1:2 3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	minimal 20:8 minimum 14:19 minutes 35:8 36:9 Mississippi 30:6 mitigate 15:1 mitigation 13:20 25:12,18 26:8,14	29:20 30:4,7 Nevertheless 25:11 New 3:6 6:8,9 29:15 NGO's 5:6 nice 22:11	14:9 18:19 19:1,5 22:20 23:20 24:9 24:11,19,21 30:17 31:10,19 32:9 33:12 34:9,10 Okay 11:22 17:10
largely 23:16 late 36:21 law 4:13,19 laws 6:20,21 lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	nammals 11:10 25:5,14 29:1 31:5 Management 1:2 3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	minimum 14:19 minutes 35:8 36:9 Mississippi 30:6 mitigate 15:1 mitigation 13:20 25:12,18 26:8,14	Nevertheless 25:11 New 3:6 6:8,9 29:15 NGO's 5:6 nice 22:11	22:20 23:20 24:9 24:11,19,21 30:17 31:10,19 32:9 33:12 34:9,10 Okay 11:22 17:10
late 36:21 law 4:13,19 laws 6:20,21 lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	25:5,14 29:1 31:5 fanagement 1:2 3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	minutes 35:8 36:9 Mississippi 30:6 mitigate 15:1 mitigation 13:20 25:12,18 26:8,14	New 3:6 6:8,9 29:15 NGO's 5:6 nice 22:11	24:11,19,21 30:17 31:10,19 32:9 33:12 34:9,10 Okay 11:22 17:10
law 4:13,19 laws 6:20,21 lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	Anagement 1:2 3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	Mississippi 30:6 mitigate 15:1 mitigation 13:20 25:12,18 26:8,14	29:15 NGO's 5:6 nice 22:11	31:10,19 32:9 33:12 34:9,10 Okay 11:22 17:10
laws 6:20,21 lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	3:6,19 4:3 6:18 nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	mitigate 15:1 mitigation 13:20 25:12,18 26:8,14	NGO's 5:6 nice 22:11	33:12 34:9,10 Okay 11:22 17:10
lay 12:7 24:15 lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6 m	nanatees 29:2 nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	mitigation 13:20 25:12,18 26:8,14	nice 22:11	Okay 11:22 17:10
lead 10:3 leasing 23:12,22 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	nanner 25:2 narine 1:5 3:20 8:1 10:11 11:10 12:3	25:12,18 26:8,14		
leasing 23:12,22 m 24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6 m	narine 1:5 3:20 8:1 10:11 11:10 12:3	25:12,18 26:8,14	NMFS 1:21 4:5	
24:2 lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	10:11 11:10 12:3			21:1 22:1
lettering 15:17 let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6			10:6,14,20 15:11	once 10:2 17:17
let's 34:22 36:12 level 26:11 27:3 levels 30:18 life 25:2 32:6	12.4 20.5 25.2 4 7	mitigations 14:13	NOAA 4:5	35:9
level 26:11 27:3 levels 30:18 life 25:2 32:6	12:4 20:5 25:2,4,7	14:15 15:4	non 10:8	open 15:18,18,19
levels 30:18 life 25:2 32:6	25:10,14 31:5,18	models 27:4,17	non-BOEM 32:11	35:9
life 25:2 32:6 m	32:9,12 33:4,6,6,7	28:8	non-governmental	operations 20:9
	33:9	Moderator 1:19	15:13	26:18
Likowice 25.7	nean 33:12	modern 19:7,9 20:5	Nord 1:22 3:8	opportunity 18:7
Likewise 25.7	neans 9:9	24:8	11:20 22:5 35:10	20:13 22:14 29:7
limited 31:4 m	neasure 28:19	MONDAY 1:13	35:17	32:15
	neasured 13:20	monitoring 31:16	normal 26:17	orders 27:20
,	26:4	mortalities 27:3	notes 16:19,22	organizer 29:14
	neasures 13:22	mortality 26:11	Notice 15:20	Orleans 3:7 6:9,9
	14:12 15:5 20:3,7	move 7:2 16:13	nourishment 21:12	29:16
	25:12,18 26:8,14	mythological 27:16	number 8:8,15	outer 6:16 28:15
	31:12,15		25:12 26:21 27:10	outer-continental
	neet 10:18 26:9	N	29:4 30:14 31:2,8	10:7
	27:13	N 3:1	31:11,17	outside 15:19
0	neeting 1:10,18	name 18:2 33:1,3	numbers 36:5,6	overall 32:1
	3:11 25:20 34:19	names 36:6	numerous 35:13	overlap 14:21
,	35:3 37:12	name's 3:4		overlapping 10:8
	neetings 6:5 15:21	national 1:3,5 3:20	0	overly 25:17
	16:6	4:11 29:20	O 3:1	
	1ega 34:6	natural 18:19 19:1	obligation 25:22	P
8 , ,	nember 18:17	19:5 22:20 23:1	observable 26:10	P 3:1
	nembers 30:4	24:9,12,14,21	27:2	part 12:14 13:16
,	neters 29:3	near 6:7	observed 25:15	14:1
*	nethod 7:9	necessary 24:8	observers 14:19	participating 19:22
-	nethodology 26:20	need 5:9,17 7:19	obsolete 27:12	parties 6:3
*	Iexico 1:7 4:1 7:8	8:3,19 12:18	occur 27:8	partly 17:7
lots 6:20,21,22	9:1,6 11:2,4,6	13:12,15,17,18	occurs 29:10	passionate 37:1

22:2 33:16,17 34:17 35:17

passive 31:15
pattern 26:17
PEIS 18:10 21:5
25:16
people 5:13 6:8,10
17:5 30:1 35:2,22
percent 23:19
perform 12:13
perform 12.13
_
performing 25:19
period 15:22 16:1
23:21 32:6 34:11
permits 22:17
permitted 10:4
Petersburg 29:16
Petroleum 22:6,8
Pharr 2:12 17:12
17:22 18:1,2
20:17
phone 36:5,6
physical 28:3
piece 17:21
place 11:17 16:9
21:15
places 15:17
plan 9:22 24:2
planning 9:3,4
20:21 21:22
plans 9:15
play 18:17
please 33:2
point 9:20 17:1
34:3,16 36:7
Policy 4:11
population 26:11
27:3
populations 25:10
posed 28:19
potential 4:15 11:9
12:19 23:10 24:14
28:17,22 30:8
32:2
potentially 30:15
power 21:7
preparation 3:21
35:5
prepared 21:3
-

nmagant 1,21 24,20
present 1:21 24:20
presently 32:5 presiding 1:19
previous 27:10
primarily 6:5
primary 6:18 27:21
problem 27:10
procedures 9:18
process 5:18,19 6:2
6:6 7:3 12:13,14
15:18 16:16 19:22
23:7 31:3 33:12
33:19 35:14
processing 18:14
18:21 19:9
produce 19:10
producing 11:2,15
production 19:5
23:8,20,22 24:17
Professor 33:4
program 14:9
16:14
programmatic 1:8
9:7,9 22:15 28:14
project 26:10
projected 27:22
projects 21:11,12
21:14
propagation 27:17
proposed 13:10,11
13:14 26:2
prospect 24:11
protect 20:3 30:1
30:22 31:13
protected 31:4
protecting 14:11
protection 10:12
14:5 21:11
protective 13:22
14:12 15:4
protects 25:2
provide 19:16 29:8
provides 18:14
provinces 34:7
public 1:10 2:10
4:21,22 21:10
29:8,21

publish 16:7	r
published 16:1,2	r
purpose 3:11 5:13	r
6:4 8:10 9:7,16,16	r
12:17 13:4,12 34:19	r
purposes 26:9	r
put 7:21 9:10	r
pylons 7:21	r
p.m 1:19 3:2 36:10 36:11 37:12	r
	r
Q	r
Quality 5:21	
quantify 28:17 29:4	r
question 34:19	r
35:2	r
quick 10:14	
quite 14:8 33:9	r
R	
R 3:1	r
ramp-up 14:18	r
reached 4:7	r
reaching 32:5	r
read 16:10	_
ready 23:3	r
real 10:13,13 11:20	r
realize 24:5	ĺ
really 21:3 32:14	
reason 4:10 13:16	
reasonable 26:1,2	r
reasonableness	r
13:3	

10.1
ramp-up 14:18
reached 4:7
reaching 32:5
read 16:10
ready 23:3
real 10:13,13 11:20
realize 24:5
really 21:3 32:14
reason 4:10 13:16
reasonable 26:1,2
reasonableness
13:3
reasons 17:3
rebuild 8:1
receive 14:2
record 35:1 36:8,10
36:11,13,16,19
red 15:17
reduce 25:13
reducing 24:18
31:12
reductions 31:14
reference 10:2
reflection 34:1,14
refraction 34:1
111111111111111111111111111111111111111

ĺ	I
regarding 18:9	22:2 33:16,1
regional 29:20	34:17 35:17
regulated 32:12	risk 25:13
C	
regulations.gov	robust 25:12
35:16	role 18:18
regulators 6:18	room 20:11
relied 27:4	routinely 6:22
remotely 7:10	
removal 32:3,4	S
renewable 18:16	S 3:1
19:2,14,17,20	safer 24:17
	sand 7:12 8:3,
reporter 16:18	33:13
representing 18:3	
18:13	schedule 15:8
require 19:19	science 27:14
26:18	33:4
required 19:17	scientific 25:4
requirements 6:15	scope 21:5,18
10:19 27:13 29:1	scoping 1:10,1
requires 4:19 13:9	5:14,22 6:4
13:10 24:10	12:14 15:21
	sea 7:10,11,13
research 25:4	7:20
reserves 24:12	
30:17	second 37:3
resist 26:12	secondary 31:
resolution 19:15	Section 3:5
21:6 33:9	sectors 18:17
resource 11:2	see 6:21 14:16
resources 7:12,13	22:11
10:22 11:10,17	Seeing 37:9
12:1,6,18 18:20	seemingly 26:
	seismic 7:5,7,9
23:1 30:9	8:6 15:1 19:7
response 35:6 37:8	
responsibilities	24:8,10,16 2
10:7	25:6,19 26:1
rest 16:5	29:6 30:9,19
Restoration 29:15	31:9 32:2,11
29:19 30:7	33:15,22 34:
restore 30:1	self 17:11
restrictive 25:17	sending 36:1
	sensitive 11:20
result 4:16 27:19	series 4:22
29:5	
resulted 25:6 26:22	SERVICE 1:5
resulting 24:1	services 18:15
review 32:1	set 5:19 10:22
ride 26:16	16:16,17 25:
right 3:14 13:17	sets 4:22 26:5
0	I

risk 25:13
robust 25:12
role 18:18
room 20:11
routinely 6:22 12:2
$\frac{\mathbf{S}}{\mathbf{S}3:1}$
safer 24:17
sand 7:12 8:3,12
33:13
schedule 15:8
science 27:14 28:7
33:4
scientific 25:4,8,15
scientific 23.4,8,13 scope 21:5,18 23:14
scoping 1:10,18 5:1
5:14,22 6:4 12:13
12:14 15:21 22:14
sea 7:10,11,13,14
7:20
second 37:3
secondary 31:18
Section 3:5
sectors 18:17
see 6:21 14:16
22:11
Seeing 37:9
seemingly 26:17
seismic 7:5,7,9,18
8:6 15:1 19:7,8
24:8,10,16 25:1,3
25:6,19 26:16
29:6 30:9,19 31:3
31:9 32:2,11
33:15,22 34:1,13
self 17:11
sending 36:1
sensitive 11:20
series 4:22
SERVICE 1:5
services 18:15
set 5:19 10:22 11:8

16:16,17 25:20

shallow 8:11	specific 9:15,22,22	surveys 7:5,8 8:9	threat 31:13	28:7 31:15
shelf 6:17 10:8	spoken 32:21	8:15 14:20 18:22	three 17:10,15 31:8	useful 32:5
28:16 33:8	St 29:16	19:8 24:6,10,16	34:6	U.S 1:1
shore 21:11	stable 7:20	25:19	threshold 27:12	
show 35:10	STAFF 1:21	systems 21:7,7,8,10	thresholds 27:18	V
shown 25:5	stages 5:4	21:13,17,17	time 1:19 9:20	validated 27:5
shut 26:18 29:4	stakeholder 19:21		34:11	validity 13:3
shutdown 28:22	stakeholders 20:1	T	timeliness 29:6	values 19:21
shut-down 29:2	20:15	take 11:16 12:6	times 26:15	varies 27:15
sic 21:12	Standard 1:19	15:15 16:4,19	today 18:3 19:8	variety 8:4,5 36:3
sign 17:2	stands 23:3	17:18 20:3 21:15	20:4 22:14	various 11:17
signed 17:9 20:18	state 5:7 15:12	27:10,19	tonight 3:11 5:2	vary 27:20
22:3	22:11 33:17	takes 26:22 27:7	16:16 24:7 34:19	verbatim 16:19,22
significant 11:9	stated 13:4	28:8	tools 14:10 18:22	vessels 26:16 33:15
25:9	statement 1:8 5:5	talk 34:22 35:1	topic 7:5 30:11	voice 20:13
single 4:8	6:12 13:1 21:4	talking 24:7 36:14	topics 7:2	
sir 33:1	22:16 29:8 30:13	36:17	totality 32:4,8	W
site 9:15,21 19:17	states 23:2,20 30:5	Tallahassee 22:7	touch 36:3	want 5:11,12 8:1
35:15	station 16:17	TAMPA 1:15	tour 13:17	17:6,19,20 29:18
siting 19:2	step 23:7	teach 33:5	tourism 12:5	30:20
size 24:14	steps 4:22	Technical 3:13	track 17:4,5	wanted 17:9 36:20
skipped 11:13	step-wise 5:19	12:9	trade 18:12	Washington 22:9
slides 35:11,11	strong 14:9	techniques 19:10	trained 14:19	waters 33:17
slowly 11:12	strongly 28:5	technologies 30:16	transportation	ways 8:5 13:13
social 29:21	structures 19:19	30:19	32:13	14:4 35:13,20
socioeconomic 12:4	32:3,4	technology 24:13	tremendous 19:8	36:3
solicit 5:6	studied 25:16	technology's 34:15	try 5:14 7:10 16:21	website 35:15 36:1
somebody 13:2	study 22:18	tell 21:19	trying 12:17 17:4	weighting 27:18
36:22	submitting 29:9,17	test 8:13	turtles 31:5	Welcome 22:10
Sorry 3:14	subsequent 9:13,21	Texas 30:6	twice 11:21	West 33:8
sort 5:19 10:8	subsurface 19:10	thank 12:11 20:16	two 31:2	Western 23:9
soul 12:16	sub-sand 7:12	20:17 22:1,12	type 15:3	we'll 7:7 8:5 16:6
sound 20:7 25:5	successful 18:18	29:10,11 32:16,17	types 5:8 7:15 8:9	17:18 35:1
30:18	19:3	37:10,10	8:15 9:12,18	we're 3:9 5:2,3,3,5
sounds 14:20	suggests 16:22	Thanks 18:1 22:13	13:19,20,21 14:15	6:19 7:6,6,15 8:20
sources 8:3,12	Sunshine 22:10	thing 15:2	14:17 34:2	8:21 9:5,8,10
South 9:4 33:5	supplemented 18:8	things 4:21 5:1		11:10 12:1,16,21
spaces 14:19	support 8:6 20:14	7:18,21 8:14,18	U	13:7,17 14:2 16:3
speak 3:9 17:10	22:16	10:13,16 11:4,11	undertaking 4:18	16:4,15,16 17:4,4
22:14 33:14 37:7	supporting 25:15	13:6,21 14:17,22	underwater 20:6	17:14,14,15 22:7
speaker 17:11	sure 10:17 32:19	15:10,14 16:14	United 23:2,20	24:6 34:9 35:7
20:18 22:2	33:3 34:12	17:8 34:20	University 33:5	36:8,15,18 37:9
speakers 2:10	surrounding 28:3	think 11:13 15:5	unrealistic 27:6	we've 4:7 17:17
17:10,16	survey 7:9 8:11	34:18	unreasonable	33:12
species 10:12 12:4	29:6	thoughts 5:8,12 6:6	26:13	whales 29:1
25:7 28:4 31:4,6,9	surveying 24:8	6:14 16:12 17:17	use 9:12,22 19:9	wind 7:19
31:13	25:3	17:18 34:20	24:10 27:14,17	wish 18:6
	-0.0	Ī	1 '	I
31.13				wishes 20:12

			Page 4:
	-		
work 7:1 20:14	5		
34:5,14	500 29:3		
working 4:8 6:7,11	51,825 24:3		
22:21			
world 34:7	6		
worldwide 25:3	6:30 1:18 3:2		
write 9:19 16:6			
writing 9:8	7		
written 18:9 29:9	7:10 36:10		
29:17 32:16	7:26 36:11		
27.17 32.10	7:27 37:12		
Y	1.21 37.12		
year 32:3			
years 14:8 15:15			
19:12 33:14,21,21			
you-all 3:12,15			
15:5 16:10			
Z			
zone 29:2			
1			
1.1 24:3			
10th 1:13			
100 32:3			
15 35:8 36:9			
15-minute 17:18			
18 2:12			
2			
2-D 33:16			
2.2 24:4			
20,000 24:3			
2010 31:10			
2012 24:1			
2013 1:13			
2017 24:1			
21 2:13			
22 2:14			
25 23:19 24:3			
29 2:16			
2 ∫ 2.10			
3			
3-D 33:17			
33 2:17			
4			
40-year 23:21			

<u>C E R T I F I C A T E</u>

This is to certify that the foregoing transcript

In the matter of: Public Scoping Meeting

Before: US DOI

Date: 06-10-13

Place: Tampa, FL

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Court Reporter

Mac Nous &