

QUADRENNIAL ENERGY REVIEW  
STAKEHOLDER MEETING #3  
PETROLEUM TRANSMISSION, STORAGE AND DISTRIBUTION ISSUES  
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1 P R O C E E D I N G S

2 MS. WELSH: Good morning, everyone. Welcome  
3 to the Quadrennial Energy Review Regional Meeting on  
4 petroleum products transmission and storage and  
5 distribution. My name is Peggy Welsh and I'm with  
6 Energetics. My company is a support contractor with  
7 the Department of Energy and we have the honor and the  
8 privilege of supporting (inaudible).

9 I'll be serving as your facilitator today.  
10 And before I introduce our very distinguished first  
11 panel, I've got a couple housekeeping notes. If you  
12 have not already signed in at the sign-in table, please  
13 do so. And if you wish to speak, there's a call list  
14 that we would like for you to check. If you don't wish  
15 to speak today, we nonetheless want to hear from you.  
16 So there is an e-mail that -- please make note of.  
17 It's QERcomments@HQ.DOE.gov.

18 The Department of Energy is serving as the  
19 secretariate for the QER task forces, but today we are  
20 privileged to have both the Department of Energy and  
21 the Department of the Interior cohosting this meeting,  
22 and there are representatives from both departments  
23 here today.

24 For those of you who are watching us live  
25 streaming, welcome. We're delighted to have you. And

1 there's one small statement that I'd like to read to  
2 you on the purpose of this meeting: Pursuant to the  
3 Federal Advisory Committee Act, the purpose of today's  
4 meeting is to ask for your individual input or your  
5 organization's input regarding petroleum product  
6 transmission, storage, and distribution and provide a  
7 forum for information exchanged.

8           To that end it would be most helpful to us if  
9 you provide recommendations and information based on  
10 your personal experience, your individual advice,  
11 information, and facts regarding the topics. The  
12 object of today's session is not to obtain any group  
13 position or consensus, rather the Departments of Energy  
14 and Interior are seeking as many recommendations as  
15 possible from all individuals at this meeting,  
16 listening in live streaming, and mailing in their  
17 comments.

18           So with that, I have the distinct honor of  
19 introducing Melanie Kenderdine, who is the director of  
20 Department of Energy's Energy Policy and Systems  
21 Analysis Office and she will introduce our very  
22 distinguished panel.

23           MS. KENDERDINE: Thank you, Peggy. And thank  
24 you all for coming today. I'm going to introduce the  
25 panelists in the order that they're going to speak,

1 starting with Secretary Moniz. I have the distinct  
2 pleasure of introducing him to you. He's the 13th  
3 secretary of Energy. This is my third tour of duty  
4 working for Secretary Moniz and it continues to be both  
5 a pleasure and a challenge. It's a pleasure because of  
6 his broad and deep expertise in energy and great sense  
7 of humor. But it's also a challenge for his staff  
8 because of his broad and deep expertise in energy.

9           He always knows more than we do and we often  
10 feel like he is staffing us. It's not supposed to work  
11 that way. Secretary Moniz was (inaudible) just a  
12 little over a year ago. Prior to that he was the  
13 director of the (inaudible) energy initiative, where I  
14 worked with him for over six years. In that capacity  
15 the secretary demonstrated his commitment to rigorous  
16 standard in the energy policy analysis as well as  
17 the -- all of the above approaching energy.

18           At MIT, then Professor Moniz -- he was on the  
19 faculty at MIT for almost 40 years -- was the director  
20 of several major and highly regarded  
21 multi(inaudible) -- multi-faculty energy studies for  
22 future of coal, the future of nuclear and the future of  
23 natural gas and the future of the electrical grid.  
24 That's pretty broad and, again, demonstrating his  
25 commitment to all of the above.

1           He was also the undersecretary of energy at  
2 (inaudible). He was the last single undersecretary of  
3 the department. And we now have three. And he had --  
4 did the job of three people. He continues to do that.

5           When at MIT he was also (inaudible) science  
6 of technology. And in November of 2010 he (inaudible)  
7 released a study for which he was a codirector of that  
8 study. That study recommended that the federal  
9 government undertake the Quadrennial Energy Review to  
10 provide it with a rigorously analyzed energy policy  
11 road map with a 40-year plan (inaudible), and that's  
12 why we are here today. We're to hear from the  
13 secretary and -- and from (inaudible) structural issues  
14 that will set our energy path forward for decades to  
15 come.

16           Ladies and gentlemen, Secretary Ernest Moniz.  
17           (Applause.)

18           MR. MONIZ: Well, thank you. I am actually  
19 going to speak from the podium today and I'm very, very  
20 pleased to be here. This is our third QER meeting and,  
21 as we'll describe in more detail, we are going out to  
22 the different parts of the country that are critical to  
23 energy nodes. This, as you probably all know, is one  
24 of those. And -- and so we want to hear and see what  
25 the infrastructure challenges are all across the

1 country.

2 I also want to thank LSU for hosting us here.  
3 And I might say that New Orleans does have a pretty  
4 special place in my -- my heart. About 40 years ago, I  
5 came here with my wife of 40 years. And I will always  
6 remember staying at the (inaudible) hotel, going to  
7 Preservation Hall. And the hospitality has been -- had  
8 been really terrific. And I do think that we went a  
9 little far last night, the fireworks are to welcome me  
10 here, but it is -- it is appreciated, nevertheless.

11 I want to recognize and thank our  
12 administration, our colleagues (inaudible) Secretary of  
13 Interior, Michael Connor. And this is an indication  
14 that this Quadrennial Energy Review is really reaching  
15 out across the entire administration, because so many  
16 departments have major equities in (inaudible) and  
17 respect to us on -- on the energy -- on the energy  
18 challenges that we -- that we face.

19 Also, from the Office of Science Technology  
20 Policy, we have an assignment up there, I see. And to  
21 say that the (inaudible) and the domestic policy  
22 counsel are basically convening this entire exercise,  
23 we will serve the Department of Energy as the executive  
24 secretariate. But again, as I said, in collaboration  
25 with many of our -- many of our colleagues across the

1 administration.

2           Finally, I want to thank Senator Landrieu for  
3 taking the time to be here. Obviously as a  
4 long-standing member and now chair of the (inaudible)  
5 Natural Resources Committee. She obviously has a major  
6 voice in -- in energy. And might -- might say that in  
7 1997 when I became undersecretary of the Department of  
8 Energy we began working on the long-running platform on  
9 key energy issues.

10           I also have met and understand Senator Vitter  
11 (inaudible) have a staff here. I see them over there  
12 and -- and thank them as well for coming.

13           The QER is something that we're very pleased  
14 has attracted bipartisan, bicameral support, and -- and  
15 we look forward to that as we -- as we go forward.  
16 It's really very important as we try to lay out, in  
17 particular, this year a set of recommendations to meet  
18 the energy infrastructure and challenges and  
19 opportunities that we have to -- to realize all of the  
20 benefits that we are seeing in our (inaudible) rapidly  
21 reforming energy -- energy sector nationally, and of  
22 course, here with the exceptional growth in the whole  
23 Gulf region in the -- in both the gas business and in  
24 the associated chemicals business, et cetera. Again, I  
25 don't have to come here to -- to tell you about what

1 that -- what that means.

2           The -- so far I have -- I have spoken now at  
3 all three of the QER meetings and a simple reason  
4 that -- again, we think that this is a critical  
5 exercise to bring good data and good analysis to the  
6 meeting -- meeting on infrastructure challenges. And  
7 each of these meetings will have a focus. Not  
8 surprisingly here, it's on petroleum transmission,  
9 storage, and distribution.

10           The whole set of infrastructure challenges  
11 that -- that we are facing, even if they are driven of  
12 opportunity (inaudible) present many challenges for us  
13 to -- to -- to meet. The -- there will be three panels  
14 here, as you know. But I will also have the  
15 opportunity, then, to actually see some of the -- some  
16 of the infrastructure and -- and these challenges as we  
17 go later on today to Port Fourchon (inaudible).

18           Now, this region, again, is -- is from  
19 (inaudible) South America's gas and oil industry,  
20 refineries, pipeline systems, et cetera. We are now an  
21 exporter of petroleum projects at a substantial scale.  
22 And this region is really the hub of all that -- of all  
23 that, the tip. This is really important in light of  
24 the ongoing evolution of -- of America's geography of  
25 energy production.

1           So while the Gulf remains the center, of  
2 course, we're seeing more and more production in -- in  
3 places like North Dakota and Pennsylvania. And this is  
4 having a huge ripple effects in terms of how the whole  
5 infrastructure is laid out and how -- how it works.

6           Annual investments of oil and gas  
7 transportation, storage, and distribution last year  
8 reached \$90 billion, much of it in this -- in -- in  
9 this region. And we have to make sure that these  
10 investments are guided, at least as best as we can,  
11 through policy towards a flexible, robust, and  
12 resilient energy infrastructure that will serve us for  
13 many -- for many decades.

14           Now, this involves many -- many factors,  
15 environmental and climate vulnerabilities, resilience  
16 and reliability, again, the impact of the shifting  
17 geography of U.S. energy supply. And very importantly  
18 and the subject today, as well, workforce development.  
19 We are going to have major opportunity, but again,  
20 major challenges to -- to meet the kinds of -- of job  
21 growth that -- that -- that we're seeking.

22           Let me say just a few words about each of  
23 those. First of all, in terms of environment --  
24 environmental vulnerabilities, once it was said that --  
25 that -- that nature always bats last and -- and you

1 can -- you can be sure that she will bat a thousand.  
2 And this area is obviously no stranger to some of the  
3 major destructions that can be caused through --  
4 through extreme weather. I can't tell you how much I  
5 heard about LA-1 in the last 13 hours. There it is up  
6 there. And we will get to see some of that later on --  
7 later on today.

8           You know, earlier this month the  
9 administration released a national claim assessment  
10 that was put together by around 300 experts over  
11 several years. It is compelling reading, but also with  
12 lots of warning. One of the major focal points of that  
13 mine assessment was the impact of different regions of  
14 the country are pretty clearly laden out. We are  
15 seeing the impacts today and we need to prepare for  
16 even more of that in the future.

17           The fact is, it's -- it's data. Warmer  
18 oceans, rising sea levels, they amplify hurricanes and  
19 their impacts. Combined with strong growth in coastal  
20 communities, the potential property damage issues,  
21 damaged energy in construction could be -- could be  
22 significant. The insurance companies was (inaudible),  
23 reports that Gulfcoast could face cumulative amount of  
24 damages of an estimated \$350 billion in the next -- in  
25 the next 20 years. And that's what we have to prepare

1 for, is to minimize those -- those -- those -- those  
2 risks and make sure that we keep our energy  
3 infrastructure functioning well.

4           And I might say that time and assessment  
5 report came out just before two new peer reviewed  
6 science papers that have now cautioned that the west  
7 Antarctic ice sheet, so called, collapsed. It's not  
8 actually collapsed. But the west Antarctic ice sheet  
9 collapse is happening, and that could add another  
10 10 feet of sea level rise in this (inaudible), kind of  
11 (inaudible) in a decade, roughly speaking.

12           So this is the kind of thing that we need  
13 to -- we need to -- to prepare for and with the major  
14 investments in energy infrastructure that are happening  
15 now and in the next few years. We really have to think  
16 about the resilience of it as we build that  
17 infrastructure for the -- for the long haul.

18           So in terms of resilience and liability,  
19 (inaudible) these issues of addressing global warming,  
20 the challenges we, the Department of Energy, have two  
21 other major roles. One is what we're doing right here,  
22 in terms of serving to organize in the administration's  
23 Quadrennial Energy Review process. Again, it is  
24 focused on specifically this year on energy  
25 infrastructure, transmission, storage, and distribution

1 of energy, fuels, and electricity.

2           Today, of course, we're focusing on the  
3 petroleum part of that equation. But another part that  
4 I'd like to bring to your attention is that we are  
5 charged as the energy -- as the agency under FEMA for  
6 emergency response for the energy infrastructure. It's  
7 called ESF12, Emergency Support Function 12. And --  
8 and again, we will be working with our -- with our  
9 committees, including the Center of Energy Committee,  
10 the House Energy Committee and the appropriators to --  
11 to look at how we build that emergency response  
12 function.

13           And that's another -- another area where  
14 anything that we can learn in this QER or by subsequent  
15 communications as to how you see that kind of a  
16 function helping materially would be -- would be most  
17 welcome. I could say that -- that with this getting  
18 stood up just recently Hurricane Sandy, for example,  
19 was a major, can we say test case. And there was some  
20 very good parts of the response and let's say there  
21 were also educational opportunities.

22           For example, the very, very strong  
23 interdependence of the electricity infrastructure and  
24 the fuels distribution infrastructure, I think, was not  
25 fully appreciated, and I'm working very hard on that.

1 And in fact, one of our future QER meet -- meetings  
2 will be specifically on that interdependence focus.  
3 But please keep that in mind there's another area where  
4 we are eager for -- for additional -- additional input.

5           The impact of shifting supplies, I mentioned  
6 earlier North Dakota, Pennsylvania has led us in, even  
7 this in this region, very well to some -- again,  
8 perhaps not entirely foreseeable infrastructure  
9 challenges. You know, the pipelines are reversing all  
10 over the place, for example. And that was one factor.

11           In another action we took recently with  
12 strong (inaudible) implications and that was our so  
13 called test scale for which petroleum was (inaudible).  
14 Obviously, the headquarters, as you know, is -- is --  
15 is right here. And what we did is our petroleum  
16 reserve people felt that it was uncertainty in terms of  
17 how the infrastructure had been rearranged, so we had a  
18 responsibility, then, to do the test scale.

19           In this case it was (inaudible), which was --  
20 was from the west (inaudible) site, to see about the  
21 distribution system in the -- in the Texoma region  
22 in -- in case that we had to draw down for -- for  
23 emergencies. So -- so that's another aspect of  
24 preparing for disruptions to our system. And then once  
25 again, it's not an accident that we're holding this

1 meeting here in -- in Louisiana that was so much at the  
2 center of these issues.

3           And finally, a comment on the workforce  
4 development, the -- we know that we have the energy  
5 industry -- kind of a mystic generation in terms of  
6 (inaudible) distribution. We got to fill that with  
7 that pipeline. The API, American Petroleum Institute,  
8 and IHS (inaudible), for example, they project about  
9 1.3 million new oil and gas jobs in this country in the  
10 next 15 years or so. And -- and about -- and four --  
11 and a third of those, roughly, in this -- in this  
12 region. So this is both opportunity and -- and -- and  
13 challenge.

14           Another way, talking about the challenge, is  
15 that if we look at the global investment -- capital  
16 investment in the energy infrastructure over the next  
17 four decades, the prediction is an average of about a  
18 trillion dollars per year over that time period. This  
19 is opportunity. If we don't get ahead of that train in  
20 terms of driving the infrastructure here, driving the  
21 technology, we're going to lose out on major  
22 opportunities, also, in terms of our -- in terms of our  
23 export positions.

24           So this is a huge opportunity. We need to  
25 use all the talent we can muster. And that's why the

1 department, a few years ago, and in my previous life,  
2 actually with Melanie, we helped the Department of  
3 Energy start the Women in Clean Energy Initiative. And  
4 that's been successful, so that last fall we kicked off  
5 a Minorities in Energy Initiative. Senator Landrieu, I  
6 want to say, was very gracious and -- by giving an open  
7 talk as we kicked off Minorities -- Minorities in  
8 Energy.

9           And in fact, in July, the head of our -- of  
10 our office will be running a round table, I believe, in  
11 Lafayette in July specifically on this issue of  
12 stimulating more minorities to take advantage of our  
13 jobs and to help our country make sure we have the  
14 talent across the board to -- to move our energy future  
15 forward.

16           So that's really what I wanted to say to kind  
17 of kick this off. Again, the QER is a very high  
18 priority for us. We think this is a -- it's -- it's  
19 not an easy lift, I'll tell you, but coordinating all  
20 the agencies getting all of this input, but both of  
21 those are essential components of being able to move --  
22 to move forward in the way we want. We look forward to  
23 your input, again, today, but also we're open for  
24 comments through any form, any -- any way, written  
25 comments we love to have them.

1           We will conclude this first phase on  
2 infrastructure in January, so please be -- be -- be --  
3 feel free and feel invited to give us your input.  
4 Thank you very much.

5           (Applause.)

6           MS. KENDERDINE: Thank you. Ladies and  
7 gentlemen, let me now take a minute to introduce you to  
8 Michael Connor -- Mike -- Michael Connor, Deputy  
9 Secretary of the Department of Interior. I had -- I  
10 had not met Secretary Connor until this morning, and  
11 before -- and I'm impressed by his bio. First, and  
12 notably in his bio, he was confirmed by the Senate in  
13 February of this year by a vote of 97 to zero.

14           That is the exact vote count for the  
15 confirmation of Secretary Moniz, and it is a  
16 substantial testament to the quality of both  
17 individuals. A score of zero from the United States  
18 Senate in this instant is a major accomplishment, and  
19 kind of like pitching a no-hitter in baseball. So I --  
20 I think that's a fabulous start.

21           Prior to becoming the Deputy Secretary,  
22 Mr. Connor counsel -- was counsel to the Senate Energy  
23 Committee for 15 years and worked at the Interior  
24 Department for the eight years of the Clinton  
25 administration. His prior work at Interior and on the

1 Hill included a substantial focus on water rights and  
2 Native Americans.

3           Secretary Connor got his JD at the University  
4 of Colorado Law School, but importantly, his  
5 undergraduate degree in chemical engineering is from  
6 New Mexico State University. I also found out this  
7 morning that Secretary Connor is from New Mexico, as am  
8 I. I was a University of New Mexico graduate. There  
9 was a substantial rivalry, certainly in basketball,  
10 between New Mexico State and UNM. My older sister,  
11 however, graduated from New Mexico State, and I spent  
12 many fun weekends at NMSU and in Las Cruces and then in  
13 other -- in Las Cruces, actually.

14           Ladies and gentlemen, Deputy Secretary of  
15 Interior, Michael Connor.

16           (Applause.)

17           MR. CONNOR: Thank you, Melanie. And thank  
18 you very much, because I thought there was going to be  
19 an aggie joke in there someplace, but I'll take it, I  
20 guess based on the fond memories of being in Las  
21 Cruces.

22           Good morning, everybody. Thank you for being  
23 here and participating in the Quadrennial Energy Review  
24 meeting. That's the most important aspect of  
25 discussions and input, for those of you who are heavily

1 involved in these energy issues of our day.

2           Obviously, discussing energy at this level  
3 and planning for our future is incredibly important to  
4 this country. Energy is the foundation of our economic  
5 competitiveness. As you know, energy security is an  
6 important part of our national security. And of  
7 course, we need to maintain because of what we know is  
8 the public's desire that we do this energy (inaudible)  
9 responsibility. So all of those aspects need to be  
10 discussed as part of this review process.

11           It's an honor to be here with Secretary  
12 Moniz, who's demonstrated a great leadership in putting  
13 together the Quadrennial Energy Review, planning the  
14 meetings that are taking place across the country.  
15 It's an incredibly time consuming and complicated set  
16 of issues to jump in. We'll leave that to Secretary  
17 Moniz to lead that discussion. I know it's going to be  
18 taking up a huge amount of his time over the next  
19 couple of months, and the rest of this year.

20           And obviously, given my background, I would  
21 just like to say, it's an honor to be here with Senator  
22 Landrieu (inaudible) in her home state. Melanie  
23 indicated for eight years I had the privilege of  
24 working as staff on Energy National Resources Committee  
25 in the US Senate. I watched the Senator Landrieu's

1 tireless advocacy for (inaudible) policies that  
2 strengthen this country's energy posture.

3           And I know that one of the things that we  
4 also very much took pride in -- in the energy committee  
5 during that point in time is the fact that the  
6 committee is one of the places where you can still find  
7 bipartisanship (inaudible) these issues. And I know  
8 that will continue under her leadership.

9           I just happen to be very fond of (inaudible)  
10 committee. I'm giving you my start. I'm here  
11 representing the Department of Interior. As Secretary  
12 Moniz indicated, we are partners and we certainly have  
13 a large role in energy process landscaping. We have a  
14 vast portfolio with the Department of Interior.

15           We're responsible for protecting this  
16 country's natural resources and iconic landscapes. We  
17 honor our cultural heritage. We are trustees to our  
18 hidden American communities. But most of all, today,  
19 we have a large stake (inaudible) the energy that  
20 powers our future here in this country.

21           So we'd like to (inaudible). Next in line is  
22 (inaudible) maintain your major role in energy in this  
23 country providing affordable and secure and clean  
24 energy supplies. So nowhere is that more relevant  
25 and -- not in magnitude that is for the Interior

1 Department than the Gulf of Mexico region. We have  
2 over 35 million acres of outer continental shelf that's  
3 leased in the Gulf for oil and gas development.

4 The oil produced here is historically the  
5 vast majority of the -- of the oil and gas resources  
6 produced from the interior land and waters. Last year,  
7 in 2013 the Gulf region produced 457 million barrels of  
8 oil. We expect this level of activity to not only  
9 continue, but to increase.

10 (Inaudible) of ocean energy management how we  
11 sell this past March, we'll need another 1.8 million  
12 acres released during that lease sale. So obviously,  
13 this level of activity, particularly in this region  
14 to -- using this infrastructure is going to continue on  
15 into the future. Given that, I think it's incredibly  
16 important that as one of the leaders of the Department  
17 of Interior be out on the ground.

18 Understanding the oil and gas infrastructure  
19 that's in place, I'm undergoing as the (inaudible)  
20 region. North Dakota (inaudible) couple days there  
21 looking at the (inaudible) activity and the production  
22 facilities. Tomorrow, if they'll let -- they'll let, I  
23 hope to be out on the drilling rig out in the Gulf as  
24 part of the local production facility, as well as  
25 (inaudible). Coming out, I had (inaudible) on the

1 restoration project.

2           So as I mentioned before there is a lot of  
3 activity (inaudible) areas of the Department of  
4 Interior. Given the Interior's role, it's incredibly  
5 important that we work hand in hand with the industry,  
6 as well as with our other partners and with Congress to  
7 ensure that we put in place the capabilities so that we  
8 can maintain our (inaudible) infrastructure, and of  
9 course the economy that's relying on that  
10 infrastructure. We want to ensure the safety of  
11 workers in the industry as well as ensure that we're  
12 doing what we can to develop the workforce necessary to  
13 support the industry in the future. And once again, we  
14 want to continue to maintain protections so we can  
15 safeguard this incredible coastal environment that  
16 exists here and all the many uses that entails,  
17 obviously the fishery industry, shrimping, oysters are  
18 an incredible part of the economic foundation of this  
19 area. The recreational opportunities, of course,  
20 (inaudible) protection so that the environment holds  
21 for the infrastructure and for the rest of the coastal  
22 region.

23           There are many risks to our transmission,  
24 storage, and distribution of petroleum (inaudible). Of  
25 course, I know this is all part of the -- the old

1 discussions that are detailed (inaudible) there are  
2 market demands that are (inaudible) for infrastructure  
3 investments and there's climate changes, Secretary  
4 Moniz indicated. There's also the extreme weather  
5 events that we have. And -- and -- and along those  
6 lines, I just wanted to talk about (inaudible)  
7 timeframe. Next week marks the start of the Atlantic  
8 hurricane season.

9           Last week the National Oceanic (inaudible)  
10 administration released their annual hurricane  
11 forecast, anticipating eight to 13 tropical storms for  
12 this season. Of these storms, three to six to become  
13 hurricanes and one to two to (inaudible) these storms  
14 (inaudible). Just to recap, and no need to tell all --  
15 all of you who lived through this situation, but at the  
16 time of Hurricanes Katrina and Rita there were 3,000  
17 oil and gas platforms and 22,000 miles of undersea  
18 pipelines that were in the path of those hurricanes.  
19 Of those, 115 platforms were completely destroyed, 52  
20 platforms were damaged (inaudible) pipeline.

21           So these destructions, as you all well know,  
22 had a regional impact, but also impacted the supply of  
23 energy to the rest of the United States. No surprise,  
24 but of course, the industry was the first to respond  
25 here to harden a lot of the infrastructure, to take new

1 investments that resulted in petroleum hubbing  
2 facilities that -- otherwise elevator (inaudible) less  
3 hard to protect them from salt and freshwater to  
4 intrusion, as well as I know, the ongoing efforts to  
5 ensure that -- access to electricity during these  
6 emergency events.

7 Overall, we need to continue that dialogue,  
8 we need to (inaudible) infrastructure. And the  
9 Department of Interior, we also have a role with  
10 respect to protecting workforce and having the safety  
11 standards in place and the environmental safe  
12 (inaudible) that we need. I think the -- the  
13 significant storm events that is like the Deepwater  
14 Horizon tragedy is indicative of the place -- of the  
15 need for all (inaudible) standards that we need to have  
16 in place to be constantly vigilant in that effort.  
17 Overall, we seek to continue to ensure that we have  
18 safe, responsible and robust oil and gas involving  
19 activity.

20 So I know that's part of the style  
21 (inaudible) continue to facilitate in partnership  
22 with -- with all of you all. From that standpoint, I  
23 will just note, then, by saying -- giving a shout out  
24 to our -- (inaudible) Interior, as I mentioned before,  
25 has a lot of (inaudible). But this is the area

1 that's -- our biggest role is the (inaudible) ocean and  
2 the safety and environmental (inaudible).

3           We've got a lot of changes in those agencies  
4 in the past year, tremendously committed individuals to  
5 ensuring that we do contend -- continue with that  
6 safety level, robust energy development. And from that  
7 standpoint, New Orleans is going to continue to be the  
8 centerpiece of our activities towards that effort and  
9 we look forward to working with all of you in this  
10 review and as we move forward for the development  
11 production (inaudible). Thank you very much.

12           (Applause.)

13           MS. KENDERDINE: Thank you, Secretary Connor.  
14 Finally, it's my pleasure to introduce you to Senator  
15 Mary Landrieu, the Louisiana senior senator in  
16 Washington. Senator Landrieu may not remember me, but  
17 I had the pleasure to work with her and her staff on  
18 the Energy Policy Act, 2005, where she was a tireless  
19 advocate for programs including R&D programs important  
20 to LSU and other academic institutions in the state  
21 that were designed to increase domestic oil and gas  
22 production in environmentally responsible ways through  
23 the development of new technologies.

24           Senator Landrieu is now the chair of the  
25 (inaudible) on the energy of national resources, a post

1 that is critically important to both Louisiana and the  
2 nation. In this capacity she rigorously promotes oil  
3 and natural gas development. She speaks frequently to  
4 Secretary Moniz about these issues and is not shy about  
5 sharing her views.

6 We had dinner with her parents last night --  
7 lovely parents. It was wonderful. I do say in this  
8 regard, the apple has not fallen far from the tree.  
9 She is a vigorous promotor of small and large  
10 businesses in her state and the champion for some --  
11 important programs in DOE, our advance technology  
12 (inaudible) manufacturing loan program, offshore wind  
13 program and the nuclear industry, in general. And we  
14 appreciate her strong support.

15 She is also, as Secretary Moniz mentioned, an  
16 ambassador in the (inaudible) on the Minorities in  
17 Energy Program, lending her voice, her experience, her  
18 expertise to engage minorities in all aspects of the  
19 energy sector.

20 We are here today to talk about the essential  
21 role Louisiana plays in helping to supply the nation  
22 with energy and the contributions it makes to its vast  
23 energy infrastructures. There's no better person to  
24 discuss this (inaudible) role than Senator Landrieu.

25 (Applause.)

1           SENATOR LANDRIEU: Well, good morning and  
2 thank you, Melanie, for that lovely introduction. It  
3 was wonderful having a dinner and reception with  
4 several of you last night. And we really enjoyed it.  
5 And Secretary was referring to his surprise when  
6 fireworks went off over the river. Of course, we told  
7 him it was specially for him. And he's usually not  
8 that gullible, but he believed us, so we just left it  
9 at that.

10           So we welcome -- we welcome Melanie, who is  
11 his right hand, and just extraordinary leader for this  
12 event and strong adviser to the secretary. And I want  
13 to say what an honor it is for Louisiana to have,  
14 really, two departments represented here this morning  
15 by the federal government. Two of the most important  
16 departments for the country and for Louisiana, and  
17 clearly, our go-to departments, Energy and Interior.

18           So Mike, thank you for representing Senator  
19 Jewel, and I speak with her frequently. And we're  
20 really happy to have you in a position of authority,  
21 knowing our state well, with your background  
22 (inaudible) person and your broad portfolio to the  
23 Department of Energy -- I mean, Department of Interior  
24 and look forward to working with you.

25           I was pleased to usher your confirmation

1 through the committee. And it came through, of course,  
2 with flying colors. He was a former staffer, so he was  
3 known well to both Democrats and Republicans. But  
4 still, these days it's tough to get things done in  
5 Washington and your leadership was -- is acknowledged  
6 and I was happy to do it.

7           Mr. Secretary, we're thrilled to have you  
8 here. You could not -- now, he knows this, but I  
9 underscored it many times, he could not do this  
10 Quadrennial Energy Review without spending a lot of  
11 time in Louisiana, the epic center of energy  
12 production, and really all of the above. And sometimes  
13 we say that, and just to make it very clear, the  
14 secretary, of course, knows this, but we're not just  
15 talking about oil and gas, but of course, coal, solar,  
16 waste, wind, wood, geothermal, hydro, and nuclear.

17           And I'm proud to say that Louisiana,  
18 Mr. Secretary, plays a role in all, literally all, of  
19 the above. Some more than others, clearly oil and gas,  
20 but nuclear is a big part of the production that goes  
21 on in our state, and as part of a Coast On Call, which  
22 is the title of our tour.

23           The secretary, of course, came down  
24 specifically for this morning to be with all of you and  
25 to hear some really terrific input that you have about

1 the challenges of our infrastructure. But after we are  
2 with you for -- briefly this morning, I'm going to be  
3 taking the secretary down to Port Fourchon so he can  
4 see the little port that can, the little port that  
5 could.

6 Ted Falgout is here, (inaudible), give a  
7 round of applause for Ted Falgout.

8 (Applause.)

9 SENATOR LANDRIEU: (Inaudible) that helped to  
10 build this extraordinary port on a little spit of land.  
11 You can't go any further south than Port Fourchon.  
12 You'll end up in Honduras. (Inaudible) my friends  
13 (inaudible) in Congress. You know -- well, you know,  
14 and I'll come back to this in a minute about revenue  
15 sharing. I said, "Look, if you don't want to put your  
16 helicopters in the air from Port Fourchon, your only  
17 other option is Honduras. So, you know, figure out in  
18 Cancun where you want to launch from to be able to  
19 access the great natural resources of this country  
20 offshore."

21 And it's really amazing to see this small  
22 port -- I mean, it's dwarfed by the port that we're  
23 sitting five minutes from, Orleans or -- or South  
24 Louisiana Port or the River Parishes or Plaquemines  
25 Port. It's literally dwarfed, but yet is a powerful

1 engine for this economy, helping create not only jobs  
2 here at home, but around the country, empowering the  
3 economy in the United States.

4           The secretary will be there for the first  
5 time when we get to see that. Then we're going to fly  
6 to New Iberia Port to be able to see a fabrication  
7 port, because it's not just like the Walmart of the  
8 offshore which is what the -- Fred will call Port  
9 Fourchon (inaudible) gadget, everything you need. But  
10 the fabrication of (inaudible) Mr. Secretaries of the  
11 structures that go out into the Gulf and a large  
12 measure are manufactured on this coastline haul, which  
13 is America's energy coast, Texas, Louisiana,  
14 Mississippi, and Alabama.

15           And we are really proud to be the coastal  
16 haul. We are really proud to be able to light up the  
17 world. And we think we do that and we think we know we  
18 do that, and we do it well. We do it across the board.  
19 We do it 365 days a year. Very few holidays, if any,  
20 are taken here because it's just an industry that can't  
21 sleep. And we're proud that we work through storms,  
22 we're very resilient and we have plans, with your help  
23 to become more resilient.

24           Let me just underscore, you're in the New  
25 Orleans region, of course, here at LSU. We're

1 thrilled; we thank LSU for hosting us, but the Acadiana  
2 region of our state, which is really the heart of the  
3 oil and gas industry, which is not too far by -- not at  
4 all by flight, two-and-a-half hours driving in very  
5 tough traffic, unfortunately talking about  
6 infrastructure.

7           So as we talk about oil, I-10 is probably one  
8 of the busiest interstates in this country. It runs  
9 through the whole southern part of the country. It  
10 goes down to one lane in Louisiana, and that's between  
11 Baton Rouge and Lafayette. It's one of the most  
12 dangerous parts of our whole interstate system and  
13 something has got to give.

14           This -- this infrastructure -- we're talking  
15 about pipelines, et cetera. But the -- the -- the oil  
16 and gas and the pipes and the people that transport it  
17 along I-10, it just really is opposite of what you  
18 think. And we'll get to see that, hopefully, today.

19           In the southwest region, in Lake Charles, the  
20 secretary spoke of 40 to \$60 billion of new investments  
21 coming in. Those investments are coming in along this  
22 I-10 corridor. We don't even have the bridge  
23 constructed where we need to over Lake Charles. For  
24 those of you that are familiar with the geography,  
25 we've got a real bottleneck with ships coming in the

1 Lake Charles corridor, basically.

2           And -- and -- and all of some major  
3 facilities that are on the other side of the bridge  
4 that needs to be raised. So here we have -- you know,  
5 my message to Secretary Moniz, to both departments is  
6 we are ready; we work hard; we can do this, but we have  
7 got to have some infrastructure investments LA-1 which  
8 (inaudible) the secretary (inaudible) one road, but the  
9 infrastructure that supports this job development and  
10 structure for the nation has been starved, literally  
11 starved of the funding that it needs to be that  
12 resilient, to be that powerful heart.

13           Now, if you move up to central Louisiana,  
14 where we have a timber as far as the eye can see,  
15 northeast Louisiana, one of the earliest gas wheels in  
16 the country in Monroe, my husband's town, of course, a  
17 hub town. And then northwest Louisiana,  
18 Mr. Secretaries, which you will not get to see today,  
19 because we're staying south, but that's where the  
20 (inaudible) shell (inaudible) the northwest part of the  
21 state.

22           So if our sister state of Texas, which is  
23 four times our size, we literally, between Texas and  
24 Louisiana we are the -- we are the two states are the  
25 power house for all of the above energy strategy. When

1 we say it, we mean it, we do it. And some push off the  
2 Texas coast -- I think we've even had some offshore  
3 wind. It's one of the weaknesses of the southeast in  
4 terms of production we have (inaudible) much wind, of  
5 course, as the west and the east coast. But in every  
6 other way we are ready to contribute. And we can, with  
7 some help.

8 I want to just get two more points really  
9 quickly and then join the panel. But I spoke about our  
10 highways, which are really important and (inaudible)  
11 and almost at full capacity. We have one highway,  
12 I-20, runs across the top of the state, but it's I-10  
13 that is just really causing a bottleneck. We've got to  
14 complete this I-49 south loop, to help us, which is  
15 critical, and finish raising Highway 1 to connect the  
16 world with the only offshore port.

17 Now, I tell my colleagues if they want to  
18 build a Port Fourchon off the Baltimore, go right  
19 ahead. Good luck getting the permits. But if you all  
20 want to do that, go right ahead. But if you want to  
21 re -- re -- you know, relocate the loop, try. But to  
22 try to get the permits to relocate any of this, it's  
23 just impossible. It's virtually politically  
24 impossible. Physically there's not enough space for  
25 the infrastructure, the bones of it, the framework are

1 here, but we just under -- we just do ourselves such a  
2 great disservice by not investing in the infrastructure  
3 that's going to continue this great all of the above  
4 strategy to move America, which is my goal.

5           And I will be pushing the President very hard  
6 and the secretaries to be an energy, not only  
7 superpower, which we already are, but energy secure and  
8 independent. Our oil imports are already falling  
9 dramatically from 60 percent, soon it will be less than  
10 23 percent, which is true -- really a game changer,  
11 life-changing, never thought we'd see it in our  
12 generation, but it's happening and it -- we're  
13 producing more oil here at home.

14           We are also consuming less because we've  
15 become much more efficient both in our  
16 transportation -- and I want to give a shout out to the  
17 petrochemical industry that's been much more efficient  
18 in its consumption. So with the demand going down and  
19 supply increasing, with Mexico potentially coming  
20 online and with Canada, a really strong ally, I, of  
21 course, am pushing hard for the Keystone Pipeline.  
22 It's not the subject of this hearing. I feel like it's  
23 a critical component of our infrastructure for bringing  
24 oil in our country. That debate is happening in  
25 Washington. We're hoping to move that debate forward.

1 I'm continuing to be a strong and, hopefully, effective  
2 advocate for it.

3           But rail pipeline -- and let me not  
4 underestimate or amiss the greatest infrastructure,  
5 which is the Mississippi River, which will never move  
6 anywhere, anytime, because (inaudible), like the  
7 secretary says, nature always has the last word. So  
8 let me not be so brass as to challenge the Mississippi  
9 River, because it's been here longer than all of us and  
10 will be here when we're gone.

11           But right now it is tamed in its banks by the  
12 Corp of Engineers. And unless the river changes  
13 courses, this is where it should be. Now, it's tempted  
14 to change courses and completely wipe out Morgan City,  
15 if it does, and come through the Atchafalaya Basin.  
16 But for right now it's right here going through the --  
17 peacefully, most of the time, through the French  
18 Quarter and through all of Louisiana. And if it stays  
19 that way, but that river is the greatest highway system  
20 in our country. And it also has been under-supported  
21 by our own state, in my opinion, and by our national  
22 government in terms of the structures that connect that  
23 river to the rest of the country.

24           So when South America comes roaring in and  
25 the economies of Brazil and South America and Africa

1 gets online and powered up, this -- this mouth of this  
2 river is going to be such a component to the broad  
3 local trade for our country.

4           So I'm going to end with this, where I always  
5 start, we are coastal (inaudible), we are happy to do  
6 the work, but we must share more directly in the  
7 revenues that this industry produces for our country.  
8 We have sent to the federal government, since the  
9 1950s -- offshore, we've sent \$260 billion in rents,  
10 royalties and bonuses alone. That doesn't count income  
11 tax, corporate income tax, sales tax that finds it's  
12 way through our state, to the region, to the nation and  
13 to the (inaudible) in Washington.

14           Those are the payments that this industry has  
15 made directly to the treasury of the United States.  
16 It's 264 billion. Louisiana has gotten less than  
17 one percent, one percent, of that money back. We don't  
18 even have \$10 to invest unless we fight every year for  
19 it to strengthen the loop. Even though it's a private  
20 facility, we could do some strengthening for it. Or  
21 LA-1 or, you know, Interstate 10 or Interstate 149.

22           The question is: Do we think the people of  
23 Louisiana, 4.5 million people, and among some of the  
24 poorest in the nation, should receive the entire burden  
25 of supporting an industry that literally supports the

1 world? And so we ask for your consideration, as you  
2 look at this infrastructure, the ways to pay for it.  
3 It's so easy to identify when infrastructure's  
4 necessary. The challenge is how to pay for it. And we  
5 have to pay for it.

6 I've already passed one piece of legislation.  
7 Our number one goal is to pass the second one that's  
8 going to accelerate these payments to America's energy  
9 coast on call to do what's fair and as fiscally  
10 responsible as possible, but to get some real money on  
11 the ground, investing in infrastructure, whether it's  
12 rail, pipelines, ports, et cetera to support this  
13 development.

14 And I'll end with just a comment about our  
15 resiliency. No one in America, contrary to what some  
16 people think, and -- and that excludes the panel here,  
17 who are knowledgeable, sensitive, and empathetic and the  
18 men and women who really understand what their job is  
19 and where we are. But I am so tired of people in  
20 Washington asking me, you know, why do we -- why do we  
21 people live there. I said, "How long do you have, you  
22 know, for me to try to explain? Either you did not pay  
23 attention to geography, you do not keep up with current  
24 events or you don't realize why we are there, because  
25 people have to run infrastructure."

1           And we're running some of the most tactical  
2 infrastructure in the nation. And we can't all commute  
3 from Dale, Colorado every week to come in to work along  
4 America's energy coast. We have to live here because  
5 we need to work here. You need to work close to where  
6 you live, if you can. And some of us live, literally,  
7 Mr. Secretary, 10 minutes from our -- or five minutes  
8 from our fishing boats. We live 10 minutes from where  
9 our helicopters take off to take us out. We don't  
10 commute two hours to work. We have to live here to  
11 keep this coast operating. You'll see that today.

12           So we've got a great challenge. I'm so proud  
13 of the secretaries for mentioning the workforce,  
14 because my message to Louisiana -- my message to the  
15 federal government, you just heard. But my message to  
16 Louisiana will be let's not miss the opportunity to  
17 give our kids in this state a passport to the middle  
18 class. These jobs are worth their weight in gold.  
19 These are not minimum wage jobs. These jobs are 30, 40  
20 50, \$100,000 a year jobs out of high school, out of  
21 high school.

22           If you want to go to LSU, if you want to go  
23 to Nicholls, if you want to go to Southern, great. But  
24 kids -- if we do the right thing our kids can come out  
25 of high school ready to go to work at 50, \$60,000 and

1 then take their time to go back to college if they then  
2 want to advance their education. So let's not  
3 miss this opportunity for -- you know, for building our  
4 workforce.

5           And I am, Mr. Secretary, so committed to work  
6 with you and the President, who I know has a great  
7 heart for this, and not only with you, to help the  
8 state strengthen its partnership to develop the workers  
9 we need to support this infrastructure.

10           So thank you all. I'm really looking forward  
11 to an exciting day. And I won't be able to stay. But  
12 all of you, thank you for being here, because I'll be  
13 taking the secretary around to show him these great  
14 ports. Thank you.

15           (Applause.)

16           MS. WELSH: Well, we've gone a little over  
17 time, but wow, what a fabulous panel. And they have  
18 graciously agreed to take a couple of questions. I'm  
19 going to limit it to about one or two. Are there  
20 questions from the audience in the room? Please raise  
21 your hand and identify yourself. Or comments,  
22 reactions? Don't be shy. Yes, ma'am, please identify.

23           MS. HAYES: My name is Janet Hayes and I'm a  
24 human rights advocate.

25           MS. WELSH: Could you -- would you mind

1 coming down and speaking at the microphone so that our  
2 court reporter and the folks who are listening via live  
3 stream can hear you?

4 MS. HAYES: I didn't expect to make a comment  
5 until the end of the meeting, so I'm a little bit  
6 unprepared. But I'm human right -- my name's Janet  
7 Hayes. I'm human rights advocate, meaning that I  
8 advocate for humans to have the right to clean air,  
9 clean water, healthcare, education, right to  
10 information, these sorts of things.

11 So I'm a little disappointed to -- honestly,  
12 to hear the panel today, because I hear of the old way  
13 thinking, and we're moving into a new world where new  
14 world energy is going to be incredibly important. And  
15 I'd like to see infrastructure money, the money that we  
16 get, diverted from fossil fuel energy industry into  
17 renewable, some solar, wind, hydro and geothermal,  
18 possibly.

19 And I just don't believe that there's such a  
20 thing as clean fossil fuel. And I think this is a myth  
21 perpetuated by the oil and gas industry. The industry,  
22 if you look at the lead. Lead paint back in 1902,  
23 companies that made lead knew that it would poison our  
24 children. They went ahead and marketed it anyway. The  
25 tobacco industry knew that tobacco causes lung cancer,

1 but they went ahead and marketed it anyway.

2           And I think that the oil and gas industry  
3 know that that industry causes climate change, global  
4 warming, most of the things that are threatening  
5 civilization, but they're going ahead and marketing it  
6 anyway. So I think we need to rely on our intuition,  
7 on our science, more than on PR and propaganda in terms  
8 of where we want to go forward in the future. Thank  
9 you.

10           MS. WELSH: Thank you. Let's let the  
11 secretary respond or Senator Landrieu respond.

12           SENATOR LANDRIEU: I'd like to respond  
13 (inaudible) the secretary, because I failed to  
14 mention -- and thank you for raising that. I failed to  
15 mention that in our (inaudible), sharing idea. And  
16 this has been proposed, not only by the President, but  
17 several members of Congress to use some of that funding  
18 for research into alternative fuels.

19           And also, I did mention that we're very proud  
20 of the forestry industry in our state, that is a  
21 renewable source of energy. In fact, because of the  
22 policies that Europe's taken -- and I could argue and  
23 debate with you, the good and bad parts of it. We're  
24 now cutting trees in Louisiana turning them into wood  
25 pellets. I just saw this up front and close last

1 weekend when I was in Toledo Bend. And selling to  
2 Europe so that they can meet their renewable fuel  
3 standard of 25 percent.

4           So Louisiana is in the forefront of all of  
5 the above. Now, you know, we're going to need fossil  
6 fuels for a long time. Our industry can talk for  
7 themselves, and I'll turn it over to the secretary of  
8 all the steps that they're taking to minimize the  
9 impact of carbon in the atmosphere, which you know, I  
10 acknowledge as a problem. But we cannot completely  
11 shift in some of the ways that you might have  
12 suggested. But I don't want you to think that I'm not  
13 and others aren't mindful of trying to do some  
14 investments into alternatives.

15           MR. MONIZ: Thank you. I have a few -- a few  
16 points. First of all, renewables do not add  
17 efficiency, although they're very important focus for  
18 us. For example, in the -- in our submission to  
19 Congress for the two-year -- 2016 budget -- 2015  
20 budget, excuse me. 2016 right now. 2015 budget,  
21 the -- as you probably know, we are working under a  
22 flat budget overall from Congress. And yet our  
23 submission asked for 40 plus percent increase in our  
24 energy sufficiency program. So that's kind of a really  
25 top priority, number one.

1           Number two, on renewables, again, a major  
2 focus area, but we have doubled solar and wind over the  
3 last five years. We'll double it again in the next  
4 five. In the department we are pushing very hard, and  
5 I must say with success, on cost reduction of the  
6 (inaudible) Department of Alternatives, both fuels  
7 and -- and -- and efficiency. Let's say solar has had  
8 a dramatic reduction in cost, and it's showing in the  
9 employment numbers.

10           Similarly, LED lighting efficiency,  
11 unbelievable drop in costs for the research employment  
12 to be done. A fact of a hundred employment in some  
13 (inaudible) to be used. So those are very good.

14           Let me go to the fossil fuel side. Two  
15 points. One is: We need a strong economy to help  
16 drive the energy transportation that we (inaudible).  
17 Number two, we are committed, even as our domestic oil  
18 and gas resources have been increasing in -- in  
19 production, we are committed to doing that within a  
20 framework of reducing carbon emissions.

21           And the reality is that the particular  
22 natural gas revolution has accounted for roughly half  
23 of all sewage reductions over the last years. We are  
24 about halfway to our 72 percent goal that the president  
25 said we (inaudible) 2020 and half of that is from

1 natural gas substitution for coal over some number of  
2 years that will -- that will continue to be part of a  
3 solution to lower our emissions.

4           So -- and we are committed all of the above.  
5 All of the above is in context of continuing to reduce  
6 emissions.

7           MS. WELSH: We have time for one more  
8 question. Sir, please identify yourself.

9           SPEAKER 1: It's not a question; it's a  
10 comment, but I'm --

11           MS. WELSH: Very good.

12           SPEAKER 1: -- vice chancery (inaudible).  
13 I'm not a ringer. Several comments made by the senator  
14 and secretary and I just wanted to say that I wanted to  
15 thank you all for coming and share this with us at this  
16 meeting. But also (inaudible) to the point (inaudible)  
17 how much we contribute to the greater good of the  
18 country. We obviously (inaudible), but I trust that  
19 somewhere out there (inaudible). I know when the  
20 Sandy thing most recently took place, talk about  
21 (inaudible) couldn't be big enough (inaudible). And so  
22 we're glad that somewhere in our resources (inaudible)  
23 to the point that the senator made about people living  
24 here, that literally generations and generations and  
25 generations in the oil industry, food industry, seafood

1 industry and (inaudible), people that made (inaudible)  
2 lived there, worked there, struggled there.

3 (Inaudible.) (Inaudible) generations. (Inaudible.)

4 Thank you all very much.

5 (Applause.)

6 MS. WELSH: Senator, do you want to respond  
7 to that?

8 SENATOR LANDRIEU: Thank you. You've been a  
9 lovely host and I really, really appreciate it. And  
10 you all, really, don't be shy about your -- your  
11 remarks. We're going to have to step out, but I really  
12 am thrilled the secretary was here, both secretary.  
13 And knowing exactly what (inaudible) project, to really  
14 hear your thoughts and you're not -- you're not shy and  
15 (inaudible) we'll hear from Don and then Dan and then  
16 Roy and all of you to really speak about what you --  
17 what we know to be true here in Louisiana, because it  
18 really will impact the plan for (inaudible). Thank you  
19 all.

20 MS. WELSH: Please join me in thanking this  
21 stellar -- Oh, Senator -- Mr. Secretary.

22 MR. MONIZ: I just wanted to go back to  
23 something that Senator Landrieu said (inaudible) middle  
24 class. I just wanted to say that the president's term  
25 is the last opportunity. I want to say that the energy

1 industry over these last years, has been a dominant  
2 force in this country for those last five years.  
3 And -- and again, that's where we want to keep going  
4 and leading our kids into (inaudible) education more  
5 strongly. All of our kids, both (inaudible), et  
6 cetera. And we want to go back to that point and so  
7 forth.

8 MS. WELSH: Thank you. Please join me in  
9 thanking this very stellar panel.

10 (Applause.)

11 MS. WELSH: We're now going to set up for our  
12 next panel, the title of which is Gulf Coast Energy  
13 Transmission Storage and Distribution Infrastructure.  
14 I invite those panels to join me up here, please.

15 All right. We're going to continue right on,  
16 if you all will be kind with regard to our agenda  
17 (inaudible). If you will please take your seats.  
18 While they're getting set up, let me just remind you,  
19 my name is Peggy Welch. I'm with Energetics. I'm the  
20 facilitator today. We are supporting the QER on behalf  
21 of the task force and the task force really does want  
22 to hear from all of you. There is an e-mail address  
23 that we'd like every one to note where they can send  
24 their written comments, those written comments, every  
25 word of which, are read by the QER staff, is

1 QERcomments@HQ.DOE.gov. We also have a box here in the  
2 room. If you have written comments, it's to my right.  
3 We'd like to receive those and they will be put into  
4 the system as well.

5 It's now my distinct honor to introduce you  
6 all to the panel that's going to be focusing on the  
7 infrastructure of the region. I'll ask all  
8 panelists -- a reminder that they have five minutes to  
9 summarize their comments. We'll take applause at the  
10 end of the panel. And I'll be facilitating a  
11 discussion.

12 Let me first introduce Mark Miller, president  
13 of Merlin Oil & Gas. Tim Felt, president and chief  
14 executive officer of Colonial Pipeline. Lori LeBlanc,  
15 director Offshore Committee of the Louisiana  
16 Mid-Continent Oil and Gas Association. And Mr. Tom  
17 Shaw, president of the Louisiana Offshore Oil Port.

18 Mr. Miller, the floor is yours.

19 MR. MILLER: Thank you very much. My name's  
20 Mark Miller. I'm the president of Merlin Oil & Gas, a  
21 small exploration and production company that began in  
22 1985. It employees some -- somewhere between 35 to 50  
23 people on a regular basis in Lafayette, Louisiana.

24 I'm also the vice chair of the Independent  
25 Petroleum Association of America. And the IPAA

1 drills -- our members drill 95 percent of the oil and  
2 gas wells in the United States. So the major oil  
3 companies and super (inaudible) drill a lot more gas  
4 wells, but predominantly regarding the exploration,  
5 it's done by a small (inaudible) such as companies like  
6 mine.

7 I also take note of the lady's comments  
8 earlier about human rights. And I just wanted to say  
9 I'm very proud to be the (inaudible) business. But I  
10 also want to be cognizant that (inaudible) should be  
11 good stewards of the environment and (inaudible). And  
12 we strive with my company, in our organization  
13 (inaudible) to minimize our -- our carbon footprint in  
14 anything we do. We want to do it a little smarter,  
15 more efficiently and be cognizant of (inaudible) nation  
16 and our state.

17 One thing I wanted to talk about today is the  
18 strategic (inaudible) that are (inaudible) was created  
19 a number of years ago. It's an excellent idea. It was  
20 designed, in my opinion, to fill the needs in a crisis  
21 situation where the country could not manage to get by  
22 from the oil and gas on its own (inaudible) reserves.  
23 The strategic petroleum reserves would be opened up to  
24 use in times of crisis.

25 Unfortunately the capacity of the strategic

1 petroleum reserve is woefully inaccurate and woefully  
2 inept when it comes to sustaining the country for long  
3 periods of time. It's days; not years. And so we need  
4 to look at providing other ways to establish energy  
5 independence for this country. One of which, I believe  
6 is the Keystone Pipeline.

7           The gathering of oil from Canada coming  
8 here -- and as the senator mentioned a moment ago, New  
9 Mexico provides security for us in terms -- in the  
10 event of a crisis where we would not have enough of the  
11 strategic petroleum reserves to sustain our government  
12 and our -- our military in times of crisis. So that's  
13 one more point I'd like to make.

14           We are glad, here in Louisiana, to be hosting  
15 to the strategic petroleum reserve. A lot of people  
16 who live nearby work for the strategic petroleum  
17 reserve. And we're glad it's here, but we need to look  
18 at other ways to enforce and (inaudible) in our ability  
19 to deal with oil and natural gas in times of crisis.

20           One other thing I wanted to mention was you  
21 may have heard it mentioned today about the (inaudible)  
22 in energy plays (inaudible) in our sister state of  
23 Texas. Ohio, Pennsylvania, these channel plays have  
24 revolutionized the oil and gas and energy -- energy  
25 business. In Louisiana we have a Kingsville Shell in

1 Shreveport, which provided a tremendous economic boom  
2 to the Shreveport area and the rest of the state.

3           We also have the Tuscaloosa (inaudible)  
4 Shell, which is going on just across the lake, here,  
5 Lake Pontchartrain. And this is a Shell play very  
6 similar to the other Shell plays in the country. It --  
7 as it grows, our needs for our pipelines,  
8 infrastructure needs to grow as well.

9           We have several responsible countries  
10 exploring for oil and gas who have teamed us  
11 (inaudible) actually involved too. This is a huge  
12 area. It stretches from Alexandria region all the way  
13 to Saint Tammany Parish. So it is a huge Shell  
14 revolution right in our backyard. We need to attend to  
15 it responsibly and carefully as we move forward.

16           The other thing I wanted to mention, not many  
17 of you have probably been to Henry, Louisiana. I live  
18 in Lafayette and Henry is about 20 miles away from  
19 where I live. If you were to drive by and blink you  
20 would probably miss it. However, the Henry hub, in  
21 terms of the world market, is a very important place.  
22 That is the gas that comes in from the Gulf of Mexico  
23 and just -- was distributed around the world. So while  
24 you and I don't think every day about the Henry hub,  
25 all the world markets that deal in natural gas are

1 looking at the Henry hub prices every day.

2 And so I suggest to the Quadrennial review  
3 panel that these things are very important.

4 Strategical reserves that must be maintained and  
5 bolstered for our state. We have emerging Shell plays.  
6 We need to learn how to deal with the emerging Shell  
7 plays and the capacity for refineries and pipelines.

8 And we have the Henry hub that brings in the  
9 largest part of the gas (inaudible) for the United  
10 States and the world. And we need to protect those  
11 through security measures and bolster them.

12 And that's -- those are my final comments on  
13 this. Thank you again for the opportunity to be here  
14 today. I think the security of all the items I  
15 mentioned in terms of national security is an important  
16 comment and (inaudible) going forward and I'll turn the  
17 microphone over.

18 MS. WELSH: Mr. Felt?

19 MR. FELT: Good morning. My name's Tim Felt  
20 with Colonial Pipeline Company. Thank you for the  
21 opportunity to share some thoughts related to the  
22 refined products pipeline infrastructure.

23 In 1961, a handful of energy companies came  
24 together to build what was then the single largest  
25 privately funded construction project in the history of

1 the United States. It was the pipelines that would  
2 deliver gasoline and other refined products from  
3 Houston to New York Harbor. At that time Secretary of  
4 Congress, Luther Hodges said, "This is the sort of  
5 action this country needs if it is to realize its full  
6 economic potential," and those words remain true to  
7 this day.

8           Today Colonial consists of 5500 miles of  
9 pipeline that safely delivers refined products to seven  
10 major airports, including (inaudible), 90 military  
11 installations and 270 delivery terminals across the  
12 south and the east. Gulf Coast refineries need  
13 cost-effective outlets, removing their finished  
14 products to market, and Colonial is connected to 29 of  
15 those refineries, safely delivering more than 105  
16 million gallons of fuel every day to more than 50  
17 million Americans in the southeast and in the -- in the  
18 northeast.

19           People in businesses in New York City and the  
20 northeast depend on Colonial for their transportation  
21 needs. We are the largest and most cost-effective  
22 transportation system for refined products, moving a  
23 gallon from Houston to New York for only  
24 four-and-a-half cents.

25           But there are two other fundamental

1 components of our system that I would like to briefly  
2 highlight for the task force, and that's safety and  
3 reliability. Colonial employees feel a sense of pride  
4 in our mission. We've made a commitment to operate  
5 safely, reliably, efficiently, and in compliance with  
6 rules and regulations meant to protect the public and  
7 the environment. Our track record is good, but our  
8 daily objective is to improve.

9           At Colonial, safety is not just a saying or a  
10 slogan. It drives everything we do. Over the past  
11 seven years we've not had a single operational-related  
12 release in our right of way, and it wasn't because we  
13 were lucky. To achieve this, we have robust systems in  
14 place and ongoing efforts to ensure the system's  
15 integrity. These include internal inspections of the  
16 pipe, corrosion control, pipe coatings, leak  
17 protection, ariel patrols and ongoing work to prevent  
18 damage by third parties and investments in research and  
19 development.

20           We also have led safety programs to educate  
21 communities and first responders along our system. And  
22 we train regularly to prepare for possible events.  
23 There's more detail in my written testimony.

24           A safe pipeline is also a reliable pipeline.  
25 The reliability of our infrastructure is a critical

1 responsibility for Colonial. In that regard, over the  
2 past five years we invested almost \$800 million in  
3 maintenance, pipeline safety, and reliability.

4 Our dedicated employees have spent  
5 considerable time and resources to prepare for and  
6 respond to extreme weather events. In fact, it's  
7 through lessons learned here along the Gulfcoast during  
8 Katrina and Rita that we were able to successfully  
9 prepare for and respond to Hurricane Sandy two years  
10 ago.

11 Secretary Moniz mentioned the interdependence  
12 between electric supply and the petroleum  
13 infrastructure. In the days leading up to Sandy's  
14 landfall, Colonial prepositioned our portable  
15 generators so that we could bring the system back  
16 online to supply fuel to New Jersey, New York, and  
17 other points effected by the storm. I'm proud to  
18 report that soon after the storm was over we were back  
19 up and operational in less than two days because of the  
20 advanced preparation we'd done.

21 In closing, I'd like to leave you with the  
22 following thoughts: There's a need for additional  
23 pipeline capacity along the Gulfcoast, largely driven  
24 by the surge of American energy production. Our  
25 pipeline is full and we frequently hear from our

1 customers about the need for additional capacity, which  
2 makes perfect sense when you look at the cost of  
3 alternatives.

4 Our customers want to use the most  
5 cost-effective, safest and most reliable transportation  
6 solution possible. That happens to be the Colonial  
7 system.

8 The United States can responsibly reclaim our  
9 own energy future, but that requires more than  
10 extracting natural resources. That means developing  
11 infrastructure, including pipelines that lets consumers  
12 take advantage of our home-grown energy. Along the  
13 way, we create jobs and opportunities.

14 Colonial wants to invest. We want to expand  
15 our infrastructure. We need a rate structure that  
16 allows us to make those upgrades and investments. If  
17 we work together on the right policies, we can take  
18 full advantage of the energy resources we have at --  
19 here at home. We can help American businesses; we can  
20 support our national defense; we can provide energy for  
21 American families and safely deliver the energy the  
22 American people need and want.

23 Thank you for your time today.

24 MS. WELSH: Thank you. Ms. LeBlanc?

25 MS. LEBLANC: Good morning. My name is Lori

1 LeBlanc. I am the director at the Offshore Committee  
2 for the Louisiana Mid-Continent Oil and Gas  
3 Association.

4 Thank you so much for the opportunity to  
5 participate today on this panel. I'd like to start off  
6 by saluting the administration and the Department of  
7 Energy for taking a hard and thorough look at the many  
8 dimensions that, together, comprise our country's very  
9 promising energy future. The Gulfcoast has long been  
10 proud to play a leading role in that future.

11 Here in Louisiana, we proudly serve as the  
12 gateway to the Gulf, the front door to the boundless  
13 energy potential just miles off our coast and thousands  
14 of feet under our water surface. We proudly do a job  
15 that other states along the Gulf, Atlantic, and Pacific  
16 Ocean either hesitate or refuse to do, a job that  
17 literally helps fuel America.

18 As Louisiana has become a leader in producing  
19 American energy, we do it in such a way that we balance  
20 energy production with environmental stewardship. As  
21 such, we are known as the energy state, but also as the  
22 sportsman's paradise.

23 To best understand both the challenges and  
24 the potential that define this region's energy sector,  
25 it's useful to take a look at the scope of energy

1 production that takes place right here in the Gulf of  
2 Mexico. The Gulf attracts investment from the US and  
3 international energy companies due to its political  
4 stability, its proximity to Gulfcoast refineries, and  
5 notably for the purpose of today's discussion, our  
6 region's strong pipeline and production infrastructure,  
7 infrastructure that is imperative to maintain and to  
8 continue to invest in.

9           According to a recent (inaudible) study,  
10 operators are expected to invest over \$70 billion in  
11 2030 on exploration in the Gulf of Mexico. Today, the  
12 Gulf, outercontinental shelf produces approximately 23  
13 percent of the total US crude oil and seven percent of  
14 the dry -- total dry gas production. This is one-fifth  
15 of our nation's energy production.

16           And while the amazing emergence of on land  
17 Shell plays that have captured most of the headlines  
18 over the past few years, oil production is getting  
19 stronger and stronger. Between 2014 and 2019 output  
20 from the Gulf is expected to rise another 26 percent  
21 from around one-and-a-half million barrels per day to  
22 1.9 million barrels per day.

23           There have been nine new discoveries of oil  
24 formations in the central Gulf since June of 2012,  
25 spurring significant bids of the most recent lease sale

1 (inaudible) over \$850 billion from the Department of  
2 Interior and signaled strong, continued business  
3 interest in our offshore Gulf of Mexico.

4 Federal revenue from offshore energy  
5 production from 2003 to 2012 totaled more than \$47  
6 billion in lease sales and royalties, a major source of  
7 revenue for the US Treasury. All of this activity has  
8 rested on implementation of strict new safety and  
9 environmental standards, which industry and the federal  
10 government have cooperatively developed since the end  
11 of (inaudible) moratorium making home operations safer  
12 than ever.

13 Deepwater exploration and production requires  
14 high-tech grids and advanced technology, which means  
15 jobs and tremendous economic impact of small businesses  
16 across our country that design, build and service this  
17 new equipment. In fact, the total economic impact of  
18 Gulf energy is immense. It creates jobs in every state  
19 of our country in some 430,000 jobs nation-wide  
20 estimated to link to Gulf energy activity, along with  
21 tens of thousands of jobs right here in Louisiana.

22 And (inaudible) offshore oil and gas industry  
23 and a \$44 billion annual impact to Louisiana. And when  
24 you factor in the pipeline and refining industries,  
25 it's a \$70 billion annual impact.

1           Where I live, just south of here, in  
2 Lafourche Parish, it's very common to have at least one  
3 energy worker in your family, or several others living  
4 in your neighborhood. It is a way of life for those of  
5 us who live, play, and work here. And communities  
6 along coastal Louisiana are experiencing --  
7 experiencing some of the lowest unemployment in the  
8 nation, from 6.4 percent after the moratorium to an  
9 amazing 2.8 percent in February of this year.

10           Others here today will describe some of the  
11 specific challenges we face in ensuring our region's  
12 energy sector flourishes over time. But let me leave  
13 you with one overriding thought: As we look toward the  
14 future that once seemed inconceivable, one in which  
15 America gradually becomes ever more energy independent.  
16 The Gulf of Mexico will remain a long-term energy  
17 powerhouse for our country. And here in Louisiana we  
18 are highly focused on continuing the industry's  
19 proactive efforts with the federal government on  
20 regulatory and permanent improvements, working with  
21 partners to sustain and promote increased Gulf activity  
22 and supporting our political leaders who understand the  
23 need to move forward on energy infrastructure needs,  
24 coastal restoration, and protection plans and the  
25 economic and workforce development strategies that will

1 help ensure our communities and our residents will  
2 remain well-equipped to serve America's energy needs  
3 well into the future.

4 And I thank you again for the opportunity to  
5 serve on this panel.

6 MS. WELSH: Thank you. Mr. Shaw?

7 Mr. Shaw has PowerPoint slides, so we'll get  
8 those loaded now. For those of you who are watching  
9 live streaming, if you cannot see the Powerpoint  
10 slides, they will be posted on the QER website later  
11 today.

12 MR. SHAW: Good morning. I'm Tom -- I'm Tom  
13 Shaw, president of the Louisiana Offshore Oil Port.  
14 LOOP is a privately owned company located in south  
15 Louisiana. It is the nation's only crude oil deepwater  
16 port. LOOP currently transports approximately eight  
17 percent of all crude oil that fuels the American  
18 economy. Of this supply, approximately 53 percent is  
19 from (inaudible) and the other 47 percent is  
20 domestically produced crude oil.

21 LOOP began as an idea among several oil  
22 companies in 1972. Development of the -- of the LOOP  
23 deepwater port was (inaudible) passage of the Deepwater  
24 Port Act in 1974. To facilitate LOOP'S development,  
25 the State of Louisiana authorized the issuance of over

1 \$700 million of tax exempt industrial and government  
2 bonds supported by the guarantee of the LOOP owners.  
3 So even prior to transporting the first barrel of crude  
4 oil in 1981, LOOP was considered the key link in the  
5 national energy infrastructure and was developed to  
6 support federal and state agencies.

7           To date, in 2014 LOOP has received an average  
8 of 1.2 million barrels of crude oil per day, which  
9 (inaudible) and onto the US markets. Its unique  
10 position in the market and its assessability to crude  
11 oil producers enables the company to adapt and meet the  
12 nation's energy needs based on the current and changing  
13 market conditions.

14           I'll move on to the next slide. Our mission  
15 is to link the rural energy producers to America's  
16 refineries. You can see the evolution of LOOP and it's  
17 connection to producers by looking at this slide. And  
18 moving from left to right.

19           LOOP began as an import facility with marine  
20 terminal that's located off -- 18 miles offshore at  
21 Port Fourchon, which was -- has been discussed several  
22 times today. It's in 110 feet of water.

23           In the -- since 1981, LOOP has offloaded 9.8  
24 million barrels of oil and offloaded, as of  
25 April 30th this year, 9,222 tankers. These tanks --

1 tankers range in size -- size from the ultra large  
2 crude carrier vessels of three million barrels each to  
3 now down to the Jones Act size vessels that's -- sail  
4 from US Port (inaudible) which are one-tenth of the  
5 size of those UFCCs. While enjoying having these Jones  
6 Act tankers coming into our facility to move American  
7 crude oil, I just will note that these Jones Act  
8 restrictions have created a bit of a bottleneck in the  
9 movement of domestic crude through routes meant for  
10 marine terminal.

11 (Inaudible) smaller size, low pumping rates  
12 as well as (inaudible) vessels themselves. Early into  
13 our evolution in 1996 -- we'll move to the -- to the  
14 middle part of the slide, we -- we started receiving  
15 large crude oil directly in (inaudible) and in 2008 the  
16 (inaudible) facility had started running through the  
17 demi pipeline and coming into (inaudible).

18 So between those two domestic streams,  
19 prolific (inaudible) over 2 million barrels have been  
20 handled and (inaudible). And then finally, the last  
21 piece in the -- the change of landscape for us is  
22 the -- the reversal of the whole pipeline. You see  
23 that in the right slide that's in yellow, and once it  
24 was a -- an outlet for crude oil to go to refineries in  
25 west Louisiana and east Texas to be offloaded from the

1 tankers.

2           Since then, in the past year, that line has  
3 been reversed and LOOP now handles oil from the  
4 production rigs in Texas as well as other parts of the  
5 country and even into Canada. And that oil now  
6 accounts for about 10 percent of all the oil  
7 (inaudible). So that's on the production side.

8           On the refining side, you'll notice we've  
9 got, really two hubs listed on there. One's the  
10 (inaudible) hub. We justed talked about it a little  
11 bit, and I'll -- I'll explain it a little bit more.  
12 The four lines coming into it are on the right-hand  
13 side.

14           There are a number of refineries located  
15 along the Mississippi River, and they're all  
16 (inaudible) pipelines (inaudible) crude oil from LOOP  
17 to those particular refineries. And also, moving on to  
18 the Saint James hub or (inaudible) some additional  
19 refineries, and also in the capline system, which goes  
20 up to -- up to the Midwest, the capline was put in in  
21 1968.

22           All total, along the Mississippi River here  
23 in Louisiana, there's 2.4 million barrels per day  
24 refining capacity. And much of that production, as  
25 you've heard from Mr. Felt, enters his pipeline system

1 and gets over to the east coast.

2           So these two hubs are very critical to, not  
3 only the day-to-day operations of all these refineries  
4 you see, but also for any short-term disruptions. In  
5 particular, I'm talking about hurricanes. So for short  
6 periods of time there was oil there and we make sure  
7 that these refineries are running (inaudible) either  
8 the SBRs (inaudible) joint or until the productions up  
9 and going and shipping resumes.

10           So I -- I -- I do want to mention we're very  
11 reliant on the electrical infrastructure, and a lot of  
12 work has been done on that infrastructure over the last  
13 few years. There are still some weak spots in that  
14 infrastructure going into the (inaudible).

15           LOOP has the largest private storage facility  
16 in the United States, 70 million barrels of storage.  
17 I'll -- I'll point your attention to the right-hand  
18 side. There are eight solar panels. We have a total  
19 storage capacity of 60 million barrels. That was the  
20 original storage that -- that LOOP put in to go with  
21 all of the -- the (inaudible) barrels.

22           Like SBR, this is very a secure storage; but  
23 unlike SBR, these (inaudible) are in continuous  
24 operational use via (inaudible) supply from a 250 acre  
25 (inaudible) site. (Inaudible) oil run-throughs

1 throughout those (inaudible).

2           On the left-hand side, further to our  
3 evolution of 2003, begins more storing above ground  
4 storage tanks. We have 15 of those tanks. That's a  
5 hundred thousand barrels each, total of 9 million  
6 barrels of storage. These typically hold special  
7 (inaudible) type oils, oils that refineries seek out to  
8 buy (inaudible) basically smaller batches than what's  
9 on the original (inaudible).

10           I just want to finish -- there -- there are a  
11 lot of things that I can discuss about the reliability  
12 and resiliency of -- I'll hold those. And I'd just  
13 like to say thank you for including me on this panel  
14 today. I look forward to the remaining discussions.

15           MS. WELSH: Thank you all. I think one of  
16 the resounding messages we've heard this morning is  
17 that the Gulfcoast, and certainly the State of  
18 Louisiana, is the hub of petroleum production,  
19 refining, transmission, storage, and delivery. And it  
20 seems to be, growing and investments are taking place.

21           But there's also vulnerabilities in the  
22 current infrastructure. So I'd like to ask each of the  
23 panelists if they could talk about what solutions they  
24 might recommend to the current vulnerabilities that are  
25 taking place, whether it's increased revenues, as

1 Senator Landrieu mentioned, whether it's securities, as  
2 Mr. Miller mentioned.

3 So let's go down the line, and if you could  
4 talk about your suggested solutions to keeping this  
5 region growing and the vulnerabilities at a low point.

6 MR. CONNOR: I guess I'll start with the  
7 security issue. That's -- that's the main thing that  
8 I'm most passionate about. And that security is often  
9 interrupted in times of hurricanes and a lot of people  
10 in the room today, they're going to talk about the  
11 coastal environment and preserving our coast. The more  
12 we preserve our coast, the less likely we have  
13 (inaudible) hurricanes. And we've done a much better  
14 job the last few years in improving that, but drawing  
15 attention from the federal government to these  
16 facilities and how key they are, they're really the  
17 keystone for the gateway for a lot of gas and oil into  
18 the United States of America.

19 So let's give them a harder look and let's  
20 see how they could improve security. As I mentioned  
21 earlier, some of these places are harder than  
22 (inaudible) in the road, but we should continue to  
23 think about in times of crisis, how do you get in and  
24 out of I-10 to these facilities; how do you get down  
25 LA-1 to these facilities when you have mounds of Army

1 people to (inaudible) secure these things?

2           So let's give it some more thought and I  
3 appreciate the opportunity to mention it here today and  
4 -- and the fact that we're having this discussion lends  
5 credence to the fact that the federal government's  
6 concerned about it, and I appreciate that.

7           MS. WELSH: Thanks.

8           MR. FELT: Most of our pipeline assets are  
9 underground, so in severe weather events our assets  
10 don't -- aren't susceptible to a lot of damage. What I  
11 would say, though, is that one thing we're all depend  
12 -- we're all depending on energy, but from a pipeline  
13 system, our biggest exposure is on electricity. Our  
14 company, alone, spends well over \$200 million a year  
15 just on the electricity to run the -- the system.

16           During Hurricane Sandy, I mentioned how,  
17 recognizing that kind of vulnerability, we had  
18 purchased, in advance, just on standby, trailer or  
19 truck-mounted generators. And so we prepositioned them  
20 up there after the hurricane, or events of the  
21 hurricane. We were up and running within a couple of  
22 days.

23           The problem was when I visited the facility  
24 after -- right after we were up and running, the  
25 challenge we had was that our tanks were full of

1 gasoline and diesel fuel and everything else. We  
2 couldn't get it out of our facility. We could -- we  
3 could move it, but people couldn't receive it. They  
4 couldn't receive it because their gas lines, literally,  
5 across the street -- because they didn't have power to  
6 receive the product from us.

7           So I think that whatever we can do to help  
8 harden the electrical systems or encourage smaller  
9 entities, I guess, to make investments or have support  
10 for them to make the investments in electricity would  
11 help significantly.

12           MS. WELSH: Great suggestion. Ms. LeBlanc?

13           MS. LEBLANC: Thank you. I know today we've  
14 heard so much about the powerhouse in the Gulf of  
15 Mexico providing our -- our energy needs, but I want to  
16 remind everyone, too, as we talk about it that there  
17 was once a time when the Gulf of Mexico was considered  
18 to be a Dead Sea. And it's only because of new  
19 discoveries and, really, advanced technology that we  
20 brought it back to life as a powerful energy province.  
21 There's so much potential out there.

22           And it's a good point to talk about the  
23 vulnerability and solutions and resolving some of the  
24 vulnerabilities. And I do have to go back to what  
25 Senator Landrieu said, she has been a champion for our

1 revenue sharing ideas and the need for revenue sharing  
2 to support the building of LA-1. I think Mike Conner  
3 (inaudible) he mentioned LA-1, but if you haven't been  
4 to Port Fourchon you really need to take that drive  
5 down there and see how vulnerable LA-1 is.

6 I will also mention coastal restoration and  
7 (inaudible) protection systems that work closely on  
8 these issues for several -- for the past 20 years. And  
9 as our coast washes away so does the protection for  
10 what we consider to be the epicenter of oil and gas  
11 development in small towns across the coast. I'm most  
12 familiar with areas of Terrebonne Parish and Lafourche  
13 Parish. And being the epicenter, we need to be able to  
14 provide the infrastructure to support them, and that  
15 includes the coastal restoration and levee protection  
16 systems.

17 And revenue sharing is -- is a way to be able  
18 to fund our state coastal master plan and fully support  
19 the revenue sharing opportunities that are out there,  
20 considering that we have generated so much revenue,  
21 five to \$8 billion per year is generated off the coast  
22 of Louisiana and goes to the federal treasury.

23 And Senator Landrieu often says that less  
24 than one percent of that is -- is returned to the State  
25 of Louisiana. So we need those revenues to be able to

1 support the infrastructure like LA-1 and our coastal  
2 efforts. Thank you.

3 MS. WELSH: Mr. Shaw?

4 MR. SHAW: I think I mentioned that LOOP has  
5 been deemed a critical infrastructure, and as such  
6 we've had a long-standing relationship with federal,  
7 state and local intelligence and law enforcement  
8 facilities.

9 It's helped us in -- in regards to physical  
10 threats, but also cyber-security threats. I will point  
11 to an (inaudible) that -- that you might want to look  
12 at. We do have what is called internal security  
13 working through where we meet on a regular basis with  
14 federal and state authorities, both law enforcement and  
15 intelligence officers. So we can assess any -- any  
16 potential risks and see how we can guard against those  
17 risks.

18 We do -- we do favor a collaborative effort  
19 on cyber-security versus regulatory effort. And we've  
20 had quite a bit of success with that. As it relates to  
21 access alone, LA-1 -- I'll take my five dollars also  
22 (inaudible) and -- but it -- it's very important for us  
23 to -- to have access to Port Fourchon.

24 And also it's access after the storms. It's  
25 been a challenge at times to get into the different

1 parishes. And even though we have a good working  
2 relationship it's handled pretty much on parish by  
3 parish basis. So as we -- of course, we have storm  
4 teams travel out and travel back in. LOOP would like  
5 to be last out and first in.

6 Of course, we travel along LA-1 from the  
7 other highways. And we -- we do cross a few parishes.  
8 For the most part we do stay pretty close, but  
9 sometimes we have to leave. And when we do, we -- we  
10 need to get back in. And that, sometimes, can pose a  
11 threat.

12 So I guess finally on the -- on the -- on the  
13 storm front we -- we've -- we've done a lot to harden  
14 LOOP itself and -- both from a physical standpoint --  
15 we were very resilient coming out of Katrina, very  
16 little -- very little damage. We're getting -- getting  
17 people back in -- getting help to help you, that's --  
18 that's probably the most important thing.

19 MS. WELSH: So the QER task force is -- is  
20 looking at infrastructure petroleum products. And part  
21 of the final report that the secretary mentioned about  
22 January are going to be a series of recommendations  
23 (inaudible) the federal government to do to help this  
24 region.

25 We'd like to hear from you all as to what you

1 think the federal role should be in your industries and  
2 what they should be doing, but they aren't currently  
3 already doing.

4 Sure. We're going to start with you,  
5 Mr. Shaw, and take in the opposite direction.

6 MR. SHAW: All right. Thank you. Well, as  
7 far as infrastructure, there needs to be sufficient  
8 infrastructure is billed out. Another of our companies  
9 are looking to building infrastructure that would  
10 actually go in the opposite direction of the  
11 (inaudible), I think that's going to be necessary  
12 because with all the production that is going to be  
13 coming on -- online in the -- the Gulf of Mexico,  
14 there's likely to be an abundance of -- of (inaudible)  
15 crude oil that's -- that's coming in, and hopefully it  
16 comes in to Louisiana (inaudible) Texas (inaudible).  
17 But if it does land here, it'll -- it'll tend to push  
18 out the foreign imports, (inaudible) our foreign  
19 imports.

20 It's going to need to find another -- another  
21 home -- additional home in (inaudible) Texas. So to  
22 extent that we can continue to support and -- continue  
23 to support projects with permitting and such to rule  
24 out, some of this oil, its excess, and certain parts of  
25 the country it (inaudible) that would be quite helpful.

1 MS. LEBLANC: Well, I've had the opportunity  
2 over the last four years to work closely with the  
3 federal government on our offshore oil and gas  
4 development meeting discussion since (inaudible)  
5 deepwater motorium. And I can tell you that there's  
6 been a (inaudible) offshore oil and gas development  
7 there. There has been some issues relative to having  
8 some clarity and consistency and transparency in new  
9 policies and new rules that really support the ongoing  
10 development in the Gulf of Mexico.

11 And fortunately, over the four years, we have  
12 developed ongoing relations and collaboration with the  
13 Department of Interior. I note the deputy secretary  
14 was here earlier. We've had regular interaction with  
15 them, between the State of Louisiana and the operators.  
16 But moving forward, we just encourage them to --  
17 federal government to continue that increased  
18 collaboration with the industry to ensure that we can  
19 continue to take advantage of the resources in the Gulf  
20 of Mexico, so that we can continue to be a promising  
21 energy province well into the future.

22 It all comes down to being able to have a  
23 streamlined (inaudible) system as well as some clarity  
24 and transparency in the regulations that will be coming  
25 out in the policies. And so that's what we ask of the

1 federal government.

2 MS. WELSH: Thank you.

3 MR. FELT: I'd like to go over what Lori said  
4 about -- well, first of all, I -- I -- I don't see  
5 significant challenges for the federal government  
6 helping, but I would say supporting permitting is  
7 always a challenge and the other thing I would mention  
8 is flexibility in rate structures to support the  
9 investments.

10 Again, I don't -- I don't see there's a big  
11 challenge from the government, but there are some --  
12 there's some opportunities for us to be a little bit  
13 more flexible if it will support some of the future  
14 infrastructure investments.

15 MR. MILLER: Yeah, I -- I think that as well.  
16 The -- the Gulfcoast, obviously is -- is a very  
17 important part of our economy. I also think that we  
18 need to consider other places to drill oil and gas in  
19 the United States in a responsible manner, such as the  
20 east coast. We are pushing for it in that regard as we  
21 speak. I think we should give more attention to that  
22 and continue to support and protect the Gulfcoast and  
23 look at other areas where we're going to be drilling  
24 for oil and natural gas as well in a safe manner.

25 MS. WELSH: All good suggestions, and we'll

1 certainly take those back to the task force. I'm going  
2 to ask a two-part question and it'll probably be my  
3 final question. But I want to give you all a chance to  
4 talk about what industry is doing, what other  
5 mechanisms are you using to shore up the resiliency of  
6 your liability of -- of your systems.

7           And if you have a chance to give one specific  
8 recommendation to the QER task force and walk with that  
9 one very specific -- is it a piece of legislation; is  
10 it an executive action? So it's a two-part question.  
11 And you can take it. Mr. Felt, we'll start with you in  
12 the middle.

13           MR. FELT: Okay. First of all, I think that  
14 from my involvement with the industry and at a lot of  
15 different levels and in our company, in particular,  
16 we're doing a lot to harden up, to make the system more  
17 resilient. And part of what we do, our -- our  
18 day-to-day inspections and maintenance and focusing on  
19 safety, everything that we do to make sure that there  
20 isn't a leak or a release really helps with the  
21 resiliency of the system, not just our company, but I  
22 know other companies are doing this too. We're  
23 investing in new technology, upgrading, and we're a  
24 50-year-old pipeline company.

25           We're constantly looking at the -- the

1 condition of the pipeline, the coating, the -- the  
2 technology that runs the pipeline. We're -- we have an  
3 ongoing plan to upgrade that technology, which helps us  
4 with resiliency. We've invested in -- I mentioned  
5 earlier the trailer-mounted generators, so that we can  
6 move them from wherever we need to respond to  
7 hurricane, whether it's in the Gulfcoast or the  
8 northeast.

9           Making the systems more resilient to  
10 saltwater intrusion there's -- there's a lot of things  
11 that we're doing, as well as just contributing --  
12 participating in research and development projects.

13           In terms of what's the one thing that the --  
14 the government can do, I think I mentioned earlier, you  
15 know, the permitting and rate structures (inaudible).  
16 I can't think of any one thing out there, just the  
17 continued support of the investment. I think we've  
18 got -- I really have to commend the government for the  
19 oversight that they have of our industry, both from a  
20 safety standpoint, from an environmental standpoint. I  
21 think they all do a very good job of -- of keeping us  
22 in line and making sure that we're not just looking to  
23 do our job of suppling (inaudible) energy, but that  
24 we're doing it safely and responsible as well.

25           MS. WELSH: Thank you for those kind words.

1 Ms. LeBlanc, any thoughts?

2 MS. LEBLANC: Yes, I do have some thoughts.  
3 You know, I said in my testimony that the oil and --  
4 oil and gas is -- is a part of a way of life for those  
5 of us who live in Louisiana. It's not just oil  
6 companies coming in and doing their thing. It's just  
7 part of who we are and what we do. And we work closely  
8 with those (inaudible) industry. And I can tell you,  
9 personally, I've been in -- had the opportunity to --  
10 to work closely with them.

11 And the oil industry is doing -- as far as  
12 their role, is a combination of prevention, safety and  
13 response. Nobody else wants a safer environment out in  
14 the Gulf of Mexico than those of us who -- who work in  
15 the Gulf of Mexico. So they have done a tremendous job  
16 focusing on those areas of prevention, safety and  
17 response.

18 Specifically, I will -- I can tell you that  
19 after Deepwater Horizon they put a billion dollars in  
20 response systems with marine (inaudible) Corporation  
21 and the helix system (inaudible) as response. But they  
22 have taken tremendous effort in working with API and  
23 some of the other trailer associations in -- on new  
24 safety standards and ramping up safety standards and  
25 they've done it willingly.

1           And because we know that that's the kind of  
2 environment we want to work in, we can also tell you  
3 the industry has put up a fair share of money to invest  
4 in LA-1 (inaudible) Port Fourchon, because they  
5 recognize the need and the urgency to develop that  
6 highway to have access to Port Fourchon, which allows  
7 us access to offshore.

8           As far as a specific recommendation, I'd go  
9 back to, once again -- you're going to hear it over and  
10 over, but until we get it, we're going to keep  
11 preaching it, and that is our fair share of -- of  
12 revenue share from the Gulf of Mexico. If there's one  
13 thing the federal government can do and Congress can  
14 do, is to increase those revenue shares so that we can  
15 continue to support the infrastructure, to develop the  
16 infrastructure, to maintain the infrastructure that we  
17 need to continue to -- producing oil and gas off the  
18 shores of Louisiana. Thank you.

19           MR. SHAW: The first part of your question,  
20 what was the industry doing. I think the industry is,  
21 you know, watching what's happening with the -- with  
22 the change and where the oil -- oil is coming from with  
23 new production coming on and willing and ready to  
24 invest wherever it needs to invest to -- to continue to  
25 do that (inaudible) refineries.

1           So I think really what the industry would be  
2 looking for would be, certainly, a policy -- a policy  
3 to help them get that accomplished, but certainly a  
4 (inaudible) policy. I guess I'd like to add from the  
5 Department of Energy's standpoint, and during Hurricane  
6 Katrina and right in the aftermath of Hurricane Katrina  
7 DOE had reached out and offered a lot of help to get  
8 back up and in operational.

9           And within two-and-a-half days we -- we were  
10 operational. But there was some risk out there that  
11 DOE helped us (inaudible), helped us find some of the  
12 platforms that had toppled during the storm. We were  
13 in our safety zone (inaudible) anchor. It (inaudible)  
14 to offer and find ways to get electrical energy  
15 (inaudible) down at our Fourchon booster station. We  
16 deployed a very large (inaudible) mega watt generator  
17 (inaudible).

18           So I guess my recommendation is -- it's  
19 really hard to find where all these storms are going to  
20 hit, but that readiness and the resources (inaudible)  
21 hampering are very important to (inaudible) wherever  
22 the next crisis may hit.

23           MS. WELSH: Thank you. Mr. Miller.

24           MR. MILLER: Well, we have made a quantum  
25 leap in technology when it comes to modern wells at oil

1 and gas production facilities. Here before, where one  
2 man would be responsible for driving into the field  
3 (inaudible). And if he didn't make it to one at a  
4 particular time, some incident might happen. We now  
5 have solar power remote operating sensing devices with  
6 cameras and e-mail alerts, so that's a -- that's a big  
7 change in improving our technology. It helps us know  
8 that things go a lot more quickly and respond more  
9 quickly.

10 As far as the -- the one thing the federal  
11 government can do, I got to say that there's probably a  
12 hundred different things we could talk about, but the  
13 one thing that I'm more familiar with today is the  
14 (inaudible) action between the government and private  
15 industry today.

16 And all of these people (inaudible) is going  
17 to follow a great opportunity to talk about these  
18 things. I don't have one specific thing, but I can see  
19 that it's a healthy exercise working with the  
20 government and private industry, and I thank you for  
21 the opportunity to be here.

22 MS. WELSH: Well, thank you all. Let me give  
23 you all a chance to provide any final thoughts, if you  
24 have any, before we conclude. Does anybody have  
25 anything they want to respond to each other or -- we've

1 got some very important people in the audience that --  
2 anything else that you want to speak to?

3 MR. FELT: I'll just build on what Mr. Miller  
4 said. I think that the collaboration between industry  
5 and -- and government is really important. I think  
6 we're -- we're all in this together, and as long as  
7 we're -- we're working together, I think that we'll  
8 make progress that will help with jobs and help with  
9 infrastructure and it will help with the economy of the  
10 United States.

11 MS. WELSH: Are there any public/private  
12 partnerships that should be established and formalized  
13 or is the collaboration at the right (inaudible), right  
14 form today?

15 MR. MILLER: Well, I would say I presume the  
16 Quadrennial review is once every four years  
17 (inaudible). Maybe we should consider doing it more  
18 often than four years. You know, things come up, new  
19 technology (inaudible) maybe we can react a little  
20 sooner than four years.

21 MS. WELSH: Well, thank you all. Please join  
22 me in thanking this very important panel.

23 (Applause.)

24 MS. WELSH: Never want to dawdle, we are  
25 going to move straight into our next panel. So if

1 those speakers, would, please join me up here.

2           Okay. Now, we're going to shift gears a  
3 little bit. We've heard briefly this morning about the  
4 new areas of the country that are possibly shifting the  
5 region's focus and we'd like to kind of talk a little  
6 more about that in some depth.

7           The title of this session is Impact of  
8 Shifting Supply Regions on the Gulf Coast  
9 Infrastructure. With us today is Mr. Roy Pontiff,  
10 executive director of the Port of Iberia. Mr. Dan  
11 Borne, president of the Louisiana Chemical Association.  
12 Mr. Mark Gorman, executive vice president operations  
13 and business development All Plains American Pipeline.  
14 Karen Gautreaux, director government relations  
15 Louisiana Chapter of the Nature Conservancy. And  
16 Mr. Ted Falgout of Ted M. Falgout & Associates, and  
17 someone well known to all of you.

18           Mr. Pontiff is going to go first. It's out  
19 of order from your agenda, but he is needing to leave a  
20 bit early. And so Mr. Pontiff, the floor is yours.

21           MR. PONTIFF: Thank you very much. And  
22 please bear with me. I have a few slides, also, that  
23 I'd like to demonstrate some of the subject matter that  
24 I will be speaking of. It's rather hard to describe a  
25 top side if you don't know what it looks like.

1                   So we began by -- again, my name is Roy  
2 Pontiff. I'm the executive director of the Port of  
3 Iberia. I'm also here in the capacity of vice chair of  
4 the Louisiana Coastal (inaudible). The Port of Iberia  
5 is a 3,500-acre coastal fabrication port that  
6 specializes in fabrication of the oil and gas industry.  
7 We're located on the Gulf of Mexico, center of the Gulf  
8 of Mexico in south-central Louisiana near the community  
9 of Iberia and Avery Island. Some of you may recognize  
10 Avery Island on the label of Tabasco. It's the  
11 international known for famous hot sauce. It's made by  
12 (inaudible).

13                   Coastal board advisory authority is an  
14 authority that was created in 2013 by the Louisiana  
15 State Legislature to research and study (inaudible)  
16 available to the state's maritime industry and the  
17 needs involving gas industry relative to the coastal  
18 and (inaudible) ports.

19                   We are about two-thirds finished with that  
20 report in the legislature, and our goal is to finish  
21 that before the summer and present it to the finding of  
22 our (inaudible) to the legislature. My comments, brief  
23 comments, today will center around the Gulf of Mexico  
24 oil and gas industry and the infrastructure required to  
25 support it, the national and (inaudible) energy

1 resource, and hopefully describe to you the job  
2 creation and opportunities that this industry supports.

3           A little bit about the history of the oil and  
4 gas industry and it has demonstrated how the industry  
5 has adapted to the changes of location. The industry  
6 started on land, in shallow marshes, shallow bays,  
7 eventually went offshore in the mid '40s. And then  
8 today we are in ultra-deep water, a relatively young  
9 industry, moving in those deep waters probably in the  
10 mid '80s. So we're talking about an industry that's  
11 relatively young compared to some other industries in  
12 this country.

13           As the demand for oil and gas increased and  
14 the existing shallow oil and gas reserve was depleted,  
15 it was necessary to move from those easy finds to those  
16 deeper finds out in the -- out in the deeper water in  
17 the Gulf of Mexico. We started with the first platform  
18 that was described as an out of sight of land platform  
19 on -- on the (inaudible) that anchored it -- that  
20 drilling rig to the -- to the Gulf floor. We had the  
21 capacity of drilling probably about 1,500 or 1,600 feet  
22 of water.

23           We moved from that to structures, where we  
24 got up to 3,000 and now we're -- the industry is  
25 referred to as (inaudible) platforms and -- and

1 floaters, which have the capacity to drill for oil and  
2 gas in almost two miles of water.

3           And I'm here to tell you today that maritime  
4 infrastructure that supported this Gulf of Mexico oil  
5 and gas industry for the years that I talked about,  
6 from '45 to '85 have not kept up with the industry  
7 needs, specifically in the support of the deep water  
8 portion of the Gulf of Mexico.

9           This is a topside, which is the typical  
10 structure that you would find, or the components of  
11 this structure that you would find being fabricated at  
12 the Port of Iberia. They are primarily (inaudible) of  
13 a production facility that is located above the  
14 waterline. And it also includes the first production  
15 deck on the platform.

16           Due to the industry moving into deeper water  
17 where the technology allowed us to do that, is much  
18 more complex because of the deeper water structures  
19 that are fabricated on these typical topsides has grown  
20 in size from 1,500 to 2,000 tons. Now they're 5,000,  
21 12,000, and sometimes 15,000 tons in size. The channel  
22 requirements of us to deliver these topsides from the  
23 port to the ultimate location where the -- where the 12  
24 to 13-foot channel that most of us work today supported  
25 the 2,000-ton (inaudible). They certainly don't

1 support the 5,000, 15,000-tons (inaudible) to 16 feet,  
2 sometimes 20 and 25 feet to float these massive  
3 projects out of the course to their location in the  
4 Gulf of Mexico.

5           The refinement of the public infrastructures,  
6 specifically Channel Gap, has not kept up with the  
7 increased size of the production facilities. We  
8 (inaudible) particularly in Louisiana trying to support  
9 an industry with two-lane roads and we certainly need  
10 four-lane interstate highways. Just an idea of the  
11 economics of a project like this that (inaudible) cost  
12 of a project (inaudible) on deck is about \$7,000 per  
13 ton, 7 to \$8,000 per ton depending on the amount of  
14 piping that's associated with the structure.

15           So if we're talking about a 5,000-ton deck,  
16 then -- then the contract to build one of these decks  
17 is anywhere from 35 to \$45 million. It takes about 90  
18 manhours per ton, so if you -- that translates into  
19 about a hundred workers working a year-and-a-half just  
20 to build one 5,000-ton deck that would go on this  
21 massive topside.

22           You've heard other panelists speak about the  
23 attractiveness of the Gulf of Mexico. I will repeat  
24 that. The Gulf of Mexico (inaudible) remain one of the  
25 most attractive areas of investment for oil and gas

1 excavation. This area is expanding at a very rapid  
2 pace, as was indicated earlier (inaudible). And  
3 perhaps a vast majority of deepwater market in the  
4 world today.

5           We think that it will -- it will continue to  
6 (inaudible) well into 2020 and beyond. Further  
7 indication, if you look to the right of this slide,  
8 between 1985 and 2010, deepwater oil production in the  
9 Gulf of Mexico increased from six percent to 81 percent  
10 in -- in the period between '85 and 2010. And gas  
11 production went from less than one to almost  
12 50 percent.

13           As you can see, if you're in the oil and gas  
14 business and you want to be a major player you've got  
15 to be able to play in the deep -- ultra deep Gulf of  
16 Mexico.

17           Further indication of companies like Chevron  
18 and Shell (inaudible) Apache and others showing a very  
19 strong interest in the Gulf of -- Gulf of Mexico is  
20 even -- is evidenced by their investment and their  
21 leaseholders.

22           I can focus now on Louisiana. The Louisiana  
23 coast (inaudible) region is what the Louisiana Coastal  
24 Advisory Authority is focusing its research on. And of  
25 course, this is an area that I am more familiar with.

1 It's defined as -- by (inaudible) coastal ports along  
2 the coast of Louisiana that connects the Gulf of Mexico  
3 with Louisiana and the nation.

4           Of the 21 coastal ports, nine are in the  
5 central region and are associated, like Port Iberia,  
6 with the fabrication and service component involving  
7 the gas industry. So when I speak of the need for deep  
8 channels in support of the Gulf of Mexico -- Gulf of  
9 Mexico oil and gas industry, these are the nine ports  
10 that I am speaking of.

11           And I might add that the secretary mentioned  
12 earlier our window of opportunity is closing while our  
13 international competitors like Mexico and South Korea  
14 and Finland are capitalizing. From an economic  
15 standpoint, when you look at the coastal oil and gas  
16 today, we support near 40,000 application jobs and --  
17 application and service jobs and 36,000 indirect jobs.

18           And throughout this area, because of the  
19 inadequacy of our channels, we have lost out on \$1.5  
20 billion in projects, either that was not competitive in  
21 our bids or we were not qualified to bid because of  
22 our -- because of our inadequate water depth. Some  
23 economists estimate that the sufficient water depth is  
24 (inaudible) corridor.

25           We see a 35 to 45 percent increase in jobs, a

1 growth that would keep 55,000 in direct jobs and  
2 (inaudible) in indirect jobs. So in closing we  
3 (inaudible) to move these jobs and the economic impact  
4 associated with them, we have to find a way to address  
5 our inadequate waterways to make our (inaudible) in  
6 Louisiana more competitive on the (inaudible). Thank  
7 you.

8 MS. WELSH: Thank you. And we understand  
9 that you're needing to join the secretary, so we  
10 appreciate your staying behind to participate in this  
11 panel. We reserve the right to come back to you with  
12 questions at a later time. Thank you, sir.

13 MR. PONTIFF: Thank you very much.

14 MR. BORNE: Tell the secretary that I admire  
15 him for bringing his wife down here 40 years ago and  
16 keeping her. A lot of guys bring their wives down here  
17 and they leave them here.

18 I'm Dan Borne and I work for Louisiana  
19 Chemical Association in Baton Rouge. Forty-three years  
20 ago I was in the senate office and I watched LOOP  
21 birthed. (Inaudible) Louisiana Offshore Oil Port was  
22 pitched to our congressional delegation. And it  
23 became -- it became a reality a few short years later.  
24 It's impressive what's going on. Colonial Pipeline,  
25 you can't live without it, you certainly can't in the

1 east, and other parts of the country.

2 I work for companies that are on the taking  
3 down end. You hear today a lot about oil and natural  
4 gas exploration. But I work for 65 (inaudible) that  
5 are located in Louisiana and operate a hundred plants.  
6 And we use both the oil and gas industry mines. We use  
7 natural gas like a bakery shop uses flour. We use it  
8 to generate electricity; we use it to generate heat; we  
9 use it to produce ammonia and methanol; we use it to  
10 produce ethylene.

11 And because of the miracle of Shell drilling,  
12 we are now competitive versus the rest of the world in  
13 a way that we have not been for 15 years. We were  
14 shipping jobs overseas and shutting down plants eight  
15 years ago. Now, we're shipping jobs in the country and  
16 we're growing plants in Louisiana and in Texas. It is  
17 a miracle of American drilling ingenuity to bring Shell  
18 gas to market and make it available.

19 One quick ratio to remember: When oil is not  
20 only a hundred dollars a barrel and natural gas is  
21 nominally at \$4 in MMBTU; that's a 25 to one ratio.  
22 Any time that ratio is seven to one or greater -- any  
23 time it's seven to one or greater, the Gulfcoast of  
24 America can knock the socks off of most of the rest of  
25 the world when it comes to our primary building block,

1 the flour of our industry, ethylene. Because about  
2 90 percent of what we use to make ethylene in Louisiana  
3 and Texas comes from natural gas. And about 80 percent  
4 of what the rest of the world uses, at least direct  
5 competitors, comes from cracking oil (inaudible).

6 It is now a built-in competitive advantage  
7 that we think and we hope that we have a comprehensive  
8 energy policy that will give us a manufacturing  
9 advantage versus the rest of the world for decades to  
10 come. It is a generational shift in terms of  
11 petrochemical manufacturing.

12 It is because the oil and gas industry of  
13 Louisiana is joined at the hip with the chemical  
14 manufacturing industry and we're excited about this  
15 hearing today. As we bring our concerns and  
16 opportunities we seek for our industry to the attention  
17 of the Department of Energy and the Department of  
18 Interior and especially to the Department of -- to the  
19 Committee on Energy and Natural Resources, which  
20 Senator Landrieu so (inaudible).

21 That committee was formed under a different  
22 name right after the War of 1812 and it was formed  
23 (inaudible) the Louisiana Purchase. It has morphed now  
24 into the Energy and Natural Resources Committee. Once  
25 again, it's great to have Louisiana leading.

1           Infrastructure issues that affect us run off  
2 from the industry that we're talking about oil and gas  
3 are these: Roads, highways, ports, waterways, bridges,  
4 rail service. Much of the same infrastructure  
5 challenges that we're going to address today with  
6 respect to oil exploration and gas exploration also  
7 face us in manufacturing as we take what our brothers  
8 and sisters in the oil and gas industry send us and we  
9 make things out of them.

10           And so we share the concern with  
11 infrastructure, especially in south Louisiana. We need  
12 a Manhattan project in this country when it comes to  
13 infrastructure upgrade and development. And we need  
14 that Manhattan project built on the realization that  
15 America can and will maintain energy independence into  
16 the near future and beyond. And that's the challenge I  
17 think we all face. How do we get a comprehensive  
18 energy infrastructure and then implement it in a way  
19 that gives us, in the southern part of this country,  
20 the infrastructure that we need to continue to provide  
21 the valuable oil and natural gas products that we  
22 provide here? Thank you.

23           MS. WELSH: Mr. Gorman.

24           MR. GORMAN: Hear me now? I'm Mark Gorman,  
25 executive vice president of Operations and Business

1 Development, Plains All American Pipeline. Plains All  
2 American Pipeline is the agent for transportation,  
3 storage, (inaudible) and marketing of crude oil as well  
4 as in the processing and transportation (inaudible)  
5 storage and marketing of natural gas lines.

6 We own and operate a diversified portfolio of  
7 assets that play a vital role in the (inaudible) USA  
8 (inaudible). On average, we handle over  
9 three-and-a-half million barrels per day of crude oil  
10 and natural gas. Through our network of assets located  
11 in the key North American (inaudible) major market  
12 policy and transportation gateways.

13 In the past five years North America has  
14 undergone a vital shift in its energy landscape.  
15 (Inaudible) involvement has increased dramatically.  
16 Domestic oil production is at its highest level  
17 (inaudible). The US (inaudible) exporter (inaudible).

18 Just deviating from the script for a second,  
19 green energy -- there's been two significant shifts in  
20 the transportation and infrastructure in the past five  
21 years. First, for the last three decades, basically  
22 the transportation (inaudible) and the largest  
23 distribution infrastructure of crude oil was set up to  
24 run from the Gulfcoast to the (inaudible). Basically,  
25 the job was distributive production for the Gulf of

1 Mexico to (inaudible) up in the Midwest.

2           The second thing is -- is that as inland  
3 production at the time. Most of that was like  
4 (inaudible) production. So to the (inaudible) along  
5 the Gulfcoast and other parts of the country geared up  
6 to process heavy (inaudible) production. This  
7 production is ramped up. Really, we have two trends  
8 going on. It's in the center part of the country.  
9 Once the Midwest refines (inaudible) are full, all the  
10 oil production had to come down to the coast.

11           So the entire pipeline infrastructure for  
12 crude oil has been turned around in the past five  
13 years. Secondly, since most of the production can be  
14 found in (inaudible) in the past five years has been  
15 (inaudible). And most of the production that we  
16 project (inaudible) found over the next five years is  
17 also (inaudible).

18           So on the macro level, when you look at it,  
19 there's a good opportunity to continue to back out  
20 (inaudible) in this country. But the reality is is  
21 (inaudible). Most of what we're finding and bringing  
22 to the Gulfcoast is light sweet crude. Most of the  
23 regaining imports coming in are getting a good  
24 response. So that's the challenge we're facing.

25           (Inaudible) natural resources to understand

1 the impact that increase in North American crude oil  
2 production will have on the retail supply and demand  
3 analysis. (Inaudible) generate a bottom up analysis of  
4 the US crude oil production (inaudible) demand and take  
5 away capacity. Our forecast is a continual work in  
6 process. It is not intended to be an expected case,  
7 but rather an identification of potential issues,  
8 including (inaudible) the North American production and  
9 refinery utilization continue on the current  
10 trajectories (inaudible) changes.

11 At the current pace of development we expect  
12 the North American crude oil production will increase  
13 an additional 3,900,000 barrels per day between the end  
14 of 2013 and the end of 2018, so approximately  
15 15-and-a-half barrels a day. Our analysis indicates  
16 that the 3,900,000 barrel a day increase in supply is  
17 as large -- a large part by displacing an additional  
18 1,700,000 barrels a day on water board imports. And  
19 1,300,000 barrels per day increase in refinery products  
20 and for all exports.

21 900,000 barrels per day, primarily light,  
22 sweet crude oil (inaudible) still does not have  
23 identifiable (inaudible) without additional (inaudible)  
24 and refining capacity. Medium (inaudible) material  
25 (inaudible) the US Gulfcoast with (inaudible) audit

1 (inaudible) and new Gulf of Mexico production.

2 Heavy water board imports would be partially  
3 displaced with an incremental Canadian production.

4 Overall, North American petroleum (inaudible) is  
5 expected to remain relatively flat. Recent increases  
6 in refinery capacity are focused on processing heavy  
7 barrels primary in the Midwest. A substantial  
8 (inaudible) pipeline infrastructure is targeted in the  
9 Gulfcoast. Consequently, the US Gulfcoast markets will  
10 be saturated with land crews.

11 Assuming (inaudible) exports of crudes are  
12 not permitted, the balance of market to keep prices at  
13 the levels needed to support the projected production  
14 (inaudible), refineries need to increase amounts of  
15 investment (inaudible). Land crews displace medium  
16 import barrels and optimizing (inaudible) plants.

17 Additionally, light crude oil refinery  
18 capacity needs to be increased and/or additional  
19 (inaudible) need to be built on the US Gulfcoast.

20 Midstream energy infrastructure needs to  
21 (inaudible) to gather and transport significant  
22 increases in North American production to handle the  
23 unexpected rapid changes in crude quality, to reach  
24 markets not accessible (inaudible) existing  
25 infrastructure and expanding US export capacity.

1           As this scenario continues to unfold and  
2 markets adjust, we expect continued volatile price  
3 differentials to serve locations (inaudible).  
4 Production of oil for certain areas is still expected  
5 to continue (inaudible) infrastructure (inaudible)  
6 resulting in volumetric imbalances.

7           As water board imports are backed out, in  
8 building the local and overall refining (inaudible) to  
9 absorb incremental barrels, particularly light sweet  
10 and (inaudible) barrels. Without price adjustments  
11 it's limiting (inaudible) quality analysis.

12           Minor operational disruptions in  
13 infrastructure and timing release can result in  
14 (inaudible) rapid (inaudible) energies. Price  
15 volatility is likely to (inaudible) by rising overall  
16 production refineries.

17           In closing, let me reiterate, our forecast is  
18 not to be an expected case, but rather an  
19 identification of the potential issues that could exist  
20 if North American production and refining utilization  
21 continue on a current tra -- current trajectories  
22 without rate (inaudible) changes. Thank you.

23           MS. WELSH: Thank you very much.

24           Ms. Gautreaux.

25           MS. GAUTREAUX: Good morning. My name's

1 Karen Gautreaux. I'm the director of government  
2 relations for the service of the Louisiana Chapter and  
3 I'm also a board member of the American (inaudible)  
4 Foundation. I appreciate the opportunity to be here  
5 today.

6 MS. WELSH: Could you pull the mic closer to  
7 you? I'm sorry.

8 MS. GAUTREAUX: Is that better? Okay. So as  
9 you've heard, Louisiana is a working coast, which means  
10 that the opportunities and challenges associated with  
11 it are very different from other great natural areas in  
12 our country. It also means that our nation is impacted  
13 in numerous ways by our vitality or our decline.

14 Today I'm going to focus a little bit on that  
15 coastal ecosystem and what we are doing to still the  
16 loss of it, and the loss of a very critical resource.  
17 As referenced earlier today, Louisiana is known as the  
18 sportsman's paradise and the ecosystem is one of the  
19 most -- one of the richest areas for biodiversity in  
20 the country.

21 It's home to several rightly endangered  
22 species, two major flyways for migratory water fowl and  
23 songbirds. Although (inaudible) in Louisiana, it's  
24 nursing grounds for 90 percent of the Gulf marine  
25 species and produces a third of our nation's seafood.

1           The Mississippi River, transporting one  
2 percent of the continental United States, so this  
3 historic river flow (inaudible) to carry. Typically  
4 deliver in the high-water period where resources that  
5 ultimately build up (inaudible) system, which is in  
6 seven parts of the world.

7           After Europeans began settling the area,  
8 levees were constructed to protect their communities  
9 and land, and that tradition continued with the current  
10 Mississippi River and tributary system that is in  
11 operation today, constructed -- authorized and  
12 constructed after the great flood of 1927 on the  
13 Mississippi River.

14           It continues -- the MRT continues to provide  
15 flood protection and maintain application on the  
16 Mississippi, but it's also disconnected the river from  
17 the natural systems it built. An area that naturally  
18 subsided (inaudible) to built over time is not able to  
19 build land and as a result, sinking faster (inaudible)  
20 the Gulf.

21           The already rising sea levels (inaudible)  
22 approach. A recent bill reported (inaudible), our only  
23 inhabited Barrier Island, was sinking at a rate of  
24 approximately three feet a century, the fastest  
25 subsiding rate in the country. In addition, the

1 reduction of river water into the system caused the  
2 salinity of coastal water to increase, which in turn,  
3 caused freshwater -- freshwater marshes to convert to  
4 open water.

5           The dredging of navigation in oil and gas  
6 canals, logging of Cyprus spores, trying to obtain  
7 hydraulic energy, (inaudible) of the marshes involving  
8 land forest, and often provided a conduit for higher  
9 salinity waters. Other types of human activities  
10 contributed to marsh degradation as well.

11           And as a result of natural processed and  
12 (inaudible) since the 1930s, Louisiana's coast was also  
13 almost 1900 square -- 1900 square miles, which is  
14 approximately 40 percent of the wetlands loss  
15 (inaudible). If no significant actions are taken, the  
16 rest of this land will al -- another 1750 square miles  
17 will be lost by the year 2015.

18           So what is being done to address this crisis?  
19 Public and private interest in Louisiana have a long  
20 history of recognizing and continue to address the loss  
21 of Louisiana's coastal wetlands. In the 1950s  
22 discussion began about the reconnecting rivery, various  
23 cyclings or diversions, two were built. One in 1956  
24 Bayou (inaudible) and 1964 White Stitch were  
25 constructed.

1           And as a result, further work and  
2 discussions, some more were authorized due to the Flood  
3 Control Act of 1965 and they were later -- later built.  
4 (inaudible) 1991 and 2002.

5           In 1989, recognizing that coastal land loss  
6 was a significant threat to the state's prosperity and  
7 all of its cultural and natural economic resources, the  
8 Legislature passed this Act 6, which provided for three  
9 things: Coastal Task Force chaired by the governor  
10 and -- including agencies that had the ability to  
11 impact wetlands plain and project limitation.

12           A coastal wetlands fund, which was later  
13 constitutionally protected by the voters of Louisiana  
14 at a very high percentage, as other (inaudible) that  
15 the coast had traditionality passed. And there was a  
16 funding source based upon oil and gas (inaudible) to be  
17 used to implement this program.

18           In 1990 a similar law was passed. Congress  
19 passed the Coastal Wetlands Plain Protection and  
20 Restoration Act, also known as the Breaux Act or  
21 (inaudible), which was a parallel in some ways to the  
22 Louisiana law. It provided a task force, funding  
23 source through the small gasoline engine tax as well as  
24 developing a plan through projects to be implemented to  
25 the US coastal land loss.

1           I have much more information about each of  
2 those -- or more information, I should say, about each  
3 of those authorities, but I just want to make a point.  
4 This has been probably the most recognized programs for  
5 both the state and federal levels (inaudible) to  
6 address.

7           In 1996 there was recognition about what  
8 projects needed to be constructed or critical -- they  
9 realized that they needed to go up in scale, so that  
10 resulted in those 2050 (inaudible) which ultimately  
11 resulted in some federal authorizations the Louisiana  
12 coastal area ecosystem (inaudible) projects were  
13 subsequently funded through other -- other mechanisms.

14           I'm just going to speak very briefly about  
15 the state's management plan, which is very important.  
16 That's the latest (inaudible) of our planned effort.  
17 It is a 50-year plan and a \$50-billion price tag that  
18 outlines the number of major landscape level projects  
19 (inaudible) the US coastal land laws. It includes  
20 marsh creation, Barrier Islands, diversions, and other  
21 hydrologic restoration that should lead to the -- the  
22 restoration of our coast, which will never be restored  
23 to its historical configuration. But we do believe  
24 that that will provide for a sustainable coastal  
25 complex.

1           This is a milestone in terms of the science  
2 that was being used to develop the master plan. There  
3 were seven models that were developed, building on the  
4 signs of all our -- our coastal programming in the past  
5 (inaudible) incredible (inaudible). I believe there  
6 are almost a thousand meetings between formal public  
7 meetings and state public meetings that (inaudible) to  
8 develop a plan.

9           However (inaudible) though, the reality is  
10 that you must have an increased level of national  
11 support in order to achieve a sustainable coast. That  
12 take -- the support would take a number of forms, but  
13 funding and (inaudible) technology as being in  
14 partnership for three areas (inaudible) progress.

15           The state has currently compiled together 41  
16 revenue sources, but we need to (inaudible) revenue  
17 source for this restoration. Our transition from land  
18 loss to (inaudible). We've benefited, but also assumed  
19 many of the risks and paid the price for (inaudible)  
20 activities in connection with security.

21           There's a deception on some that monies from  
22 the Deepwater Horizon incident (inaudible) restoration  
23 on our coast. Today, the only significant sources of  
24 funding are associated with the (inaudible) through the  
25 National Fish and Wildlife Donation. Only the

1 (inaudible) from the Ocean and Clean Water Act helps  
2 (inaudible) deposited (inaudible).

3 (Inaudible) have been received and used. We  
4 don't know what -- over what timeframe and how much  
5 we've ultimately received. In the event we receive  
6 funds (inaudible) higher (inaudible) of current  
7 protections (inaudible) funds, it's enough to provide  
8 good foundation for restoring our coast, not achieving  
9 (inaudible).

10 Another opportunity is work-related  
11 relations. We have world class scientists in our  
12 organization (inaudible) public, private or  
13 non-government. Much of the technology -- technology  
14 (inaudible) coastal problem (inaudible) to other areas  
15 in similar situations. And that exportation can be  
16 (inaudible) as well.

17 In addition, we should focus on utilizing  
18 natural infrastructure wherever possible. For example,  
19 we're developing partnering with the state and private  
20 partners (inaudible) constructing (inaudible) that  
21 provide shoreline protection we have to have for  
22 quality improvement (inaudible) the oyster industry.  
23 (Inaudible) can keep up with sea level (inaudible).

24 Lastly, we should investigate new  
25 partnerships. We have good examples (inaudible). For

1 example, there's (inaudible) efforts (inaudible)  
2 developing (inaudible) that allow fishing (inaudible)  
3 restoration (inaudible). Some of our partners in the  
4 oil and gas industry are investigating ways to protect  
5 their infrastructure while supporting habitat near that  
6 infrastructure.

7 This is a (inaudible) that probably affects  
8 more than one sector of the solution (inaudible)  
9 partners. So in summary this morning (inaudible)  
10 coastal (inaudible) investigation (inaudible) how and  
11 where we will be living in the future. This is my home  
12 (inaudible) continuing to contribute to the nation's  
13 (inaudible) cultural experiences (inaudible). Thank  
14 you.

15 MS. WELSH: Thank you. Mr. Falgout.

16 MR. FALGOUT: Thank you for the opportunity.  
17 As Senator Landrieu mentioned, having had this  
18 opportunity to be the director for Port Fourchon for 31  
19 years before retiring and seeing it evolve from a  
20 fishing village to (inaudible) the most significant  
21 (inaudible) port has been very gratifying. And there's  
22 certainly no question that the deepwater Gulf of Mexico  
23 has evolved into this country's premier domestic oil  
24 and gas base.

25 I guess the question of the day is: Is will

1 we be able to sustain the landside support necessary,  
2 given the growing challenges of coastal Louisiana? And  
3 you know, this discussion, it's pretty much been  
4 sparingly talked about and I think it's going to soon  
5 find itself as a major topic of concern in -- in  
6 boardrooms across the economic sector by government and  
7 even mainstream America before too long.

8           Clearly, the -- the culprit that's going to  
9 drive this discussion is sea level rise. The reason  
10 it's going to be an issue to the offshore energy  
11 industry before it impacts many of the other areas in  
12 this country is that the industry is overwhelmingly  
13 being serviced out of coastal Louisiana.

14           And as -- as Karen mentioned, coastal  
15 Louisiana, is experiencing the double whammy effect  
16 as -- as I call it in that because we're built by a  
17 delta, we're relatively young geologically, we're  
18 still compacting. So we're sinking and the sea level  
19 is rising, so the comparative sea level rise that  
20 coastal Louisiana is facing is -- is probably double  
21 whack of the rest of the coastal areas across this  
22 country.

23           But -- so we're going to be the laboratory on  
24 how to deal with sea level rise, but certainly all  
25 coastal areas are going to have to deal with this at

1 some point in the future. This phenomenon is -- is  
2 challenging the existence of, not only coastal ports,  
3 as Roy Pontiff mentioned, that are, you know, essential  
4 in efficiently servicing the energy industry, but it's  
5 also jeopardizing the existing coastal infrastructure  
6 and the communities, themselves that form the basis of  
7 the support.

8           As the sea rises, the once vibrant marshes  
9 disappear, turning to open water and more and more of  
10 the communities have to resort to constructing  
11 expensive levee systems to protect themselves from the  
12 storms. The cost of insuring these communities is --  
13 is rapidly escalating and paper requirements and flood  
14 insurance costs are challenging our ability for these  
15 communities to sustain themselves.

16           Southern Lafourche Parish has been dealing  
17 with (inaudible) sea level rise for decades. We've  
18 evolved into the example of how to take on these  
19 challenges towards achieving sustainability. I often  
20 say we were doing coastal restoration and protection  
21 before it became cool to do coastal restoration and  
22 protect it.

23           But we've taxed ourselves, we've built  
24 hurricane class levee systems around the perimeter of  
25 our community before most others realized that there

1 was a problem. We used dredge material to nourish our  
2 beaches to elevate the port. We did this because it  
3 was a matter of survival. And -- and today, the  
4 benefits of these efforts are very evident in paying  
5 this country huge dividends in offshore (inaudible) and  
6 revenues and seafood production and hundreds of  
7 thousands of jobs.

8           Additionally, when it became evident that  
9 Fourchon (inaudible) the deepwater Gulf of Mexico  
10 operation we embarked on a very aggressive (inaudible)  
11 to achieve port and highway infrastructure upgrades.  
12 I've got my \$5 down because (inaudible) talk about LA-1  
13 in the public comment period.

14           But if we're going to continue to have  
15 efficient access to these viable resources, we must  
16 address the challenge to sea level rise and its impact  
17 to coastal communities. Many of these challenges may  
18 be beyond the capabilities of the local communities and  
19 -- and the state, itself. As Karen mentioned, the \$50  
20 billion coastal restoration plan of Louisiana will be  
21 extremely difficult to achieve at any level of  
22 sustainability without a robust and responsible  
23 development of offshore resources and sharing those  
24 revenue-generated from the energy resources with the  
25 whole state.

1           If we fail to take on this challenge, the  
2 United States may find itself with substantial offshore  
3 resources, but very inefficient means of accessing them  
4 in a very poor coastal community structure to support  
5 this act. Thank you.

6           MS. WELSH: Very interesting comments. What  
7 I've heard from each of you is that this region is  
8 fragile and that we must retain its character and  
9 resiliency.

10           The subject of the panel is on shifting  
11 regions, transport, other alternatives, how it will  
12 impact the -- the Gulf Coast. So I wanted to address  
13 that. There's talk of -- of dredging channels; there's  
14 talk of weak highway systems; there's talk of the  
15 mismatch between the crude that's being supplied in  
16 other parts of the country with the crude that's being  
17 imported.

18           So let's start a little bit with how the  
19 transport alternatives are going to impact the region.  
20 A lot of pipelines are reverting, a lot of rail and  
21 barge is being relied on -- on -- in a -- in a zone  
22 that is majestic and yet fragile.

23           Can you all talk a little bit about how the  
24 region is being impacted by a shift in drilling  
25 resources and -- and other resources and how that's

1 impacting this beautiful coastal region?

2 MR. FALGOUT: Thank you.

3 MS. WELSH: You were anxious to jump in.

4 MR. FALGOUT: It's dear to my heart in that,  
5 you know, we're -- we're seeing the development of the  
6 Shell bays all across this country, but at the end of  
7 the day, the pipeline infrastructure system that  
8 coastal Louisiana possesses is going to be an extremely  
9 significant to any place in this country. And today  
10 we're seeing, you know, tons of trains coming down,  
11 bringing oil from North and South Dakota to the  
12 distribution system that exists in south Louisiana,  
13 that's connected to 50 percent of this country's -- the  
14 refining capabilities of this country. So that's not  
15 going to change. I'm not seeing anyone standing in  
16 line waiting to take on new pipelines and -- and change  
17 the way that we're (inaudible) here in coastal  
18 Louisiana and the connection that we have with the rest  
19 of the country.

20 So that is going to remain extremely  
21 significant and coastal Louisiana can play a huge role  
22 and -- and no matter where this oil and gas is coming  
23 from and to not recognize that and to not invest in the  
24 infrastructure that's already in place. The billions  
25 of dollars already in place. Environmental impacts

1 already occurred and think you can do it somewhere  
2 else, I think it's just not (inaudible).

3 MS. WELSH: Ms. Gautreaux, you talked about  
4 coastal restoration and levee development, can you  
5 speak to the impact or the increase in barge transport  
6 of this region?

7 MS. GAUTREAU: Well, the one thing I would  
8 say about barge transport is, we actually held a -- a  
9 summit a year ago, past January, to talk about  
10 (inaudible) compatible with flood -- flood risk  
11 reductions, ecosystem restoration and navigation. And  
12 one of the -- the items that was pointed out by members  
13 of our industry and navigation groups were that the  
14 (inaudible) transportation across the seas in the  
15 country were not -- they didn't felt (sic) adequately  
16 addressing the corridor into the Mississippi River  
17 (inaudible) bottom part of the river. (Inaudible) that  
18 we saw during Katrina -- or after Katrina and that  
19 shifting (inaudible) Mississippi River impact  
20 (inaudible) this is an important area to conserve, but  
21 in general we need to make sure that our waterways are  
22 more of a future in (inaudible) transportation than  
23 they currently are.

24 MS. WELSH: Mr. Gorman, do you have any  
25 comments on the questions?

1 MR. GORMAN: Sure. And I agree with Ted's  
2 comments that I think you have 50 percent of the  
3 refinery infrastructure (inaudible). The pipelines  
4 that people (inaudible) play a critical part and this  
5 is going to be a vital (inaudible). I think the two  
6 transient problems we've seen over the last five years,  
7 an increase in rail movements in the US Gulfcoast and  
8 an increase (inaudible) Gulfcoast. Our problems are  
9 temporary in nature. Ours (inaudible) is that as  
10 additional pipeline infrastructure is built on those  
11 and more interregional distribution (inaudible). Our  
12 thought process is (inaudible).

13 I think rail (inaudible) roles in moving  
14 production to the east coast and west coast (inaudible).  
15 And ours (inaudible). I think (inaudible) play  
16 important role in production (inaudible). I -- I think  
17 at more pipeline capacity (inaudible) gets established  
18 it will probably (inaudible).

19 MR. BORNE: (Inaudible) is really important  
20 for manufacturers because we ship a lot of stuff on a  
21 barge and we receive a lot of stuff by barge  
22 (inaudible). And of course, (inaudible) down the  
23 Mississippi, by the way, when water is low (inaudible)  
24 sometimes (inaudible) and when the water is high, they  
25 sometimes don't in the Mississippi River. So

1 (inaudible) for an infrastructure plan that recognizes  
2 our waterways is important part of this insurance.

3 That's why Jefferson sent these two guys to  
4 France to buy (inaudible) Orleans because he knew that  
5 whoever controlled the river, controlled the country.  
6 And so that's got to be kept open, it's got to be  
7 viable. East and west along the Intercoastal Canal,  
8 those waterways are extraordinarily important in  
9 maintaining the commerce that we at the chemical and  
10 manufacturing industry have been (inaudible).

11 On the railways, rail competition is a busy  
12 (inaudible) a big, big inhibitor in progress in our  
13 industry. Rail rates are extraordinarily high. We own  
14 six (inaudible) railroads now. It's very difficult to  
15 negotiate a rate with them (inaudible) to appeal that  
16 to the service transportation board. So I think, as I  
17 mentioned to the secretary offline, earlier this  
18 morning, a strong look at the -- at the service  
19 transportation board and how it rules with rail rates  
20 and those types of challenges would be appropriate and  
21 guarantee that we have an infrastructure that can move  
22 the product where it needs to go.

23 MS. WELSH: Well, that's an interesting  
24 concept I haven't heard that. And it's a great jumping  
25 off point to ask the question that I asked the other

1 panel and that is: What is the federal government's  
2 role in this region? Particularly, as the shifting is  
3 taking place in America. What is the federal  
4 government not doing that it should be doing now to  
5 help the Gulfcoast region to retain its resiliency and  
6 reliability?

7 MR. FALGOUT: I don't think that the federal  
8 government is investing enough in the infrastructure  
9 that would allow us to (inaudible).

10 MS. WELSH: Can you put the mic closer to  
11 you, please?

12 MR. FALGOUT: As I said, I don't think the  
13 federal government is -- has a long thought out plan  
14 for investment with the infrastructure that will  
15 facilitate the billions of dollars that are going to be  
16 invested as we further develop our energy resources.

17 And if you look at what's going on, you know,  
18 the worst thing in the world was earmarks, okay, in  
19 congress, and -- but unfortunately earmarks were the  
20 only way we built major infrastructure in this country  
21 prior to doing away with them and we haven't come up  
22 with a mechanism to build these major infrastructure  
23 projects away from earmarks. We have a Tiger Grant  
24 system in DOT, which is \$500 million, not enough --  
25 LA-1 alone needs that much money.

1           There are hundreds of billions of dollars in  
2 request infrastructure projects across the country.  
3 How can you compete and how can you plan this? So how  
4 do you pay for it? And I think it's very clear. You  
5 have an industry in coastal Louisiana, offshore the  
6 Gulf of Mexico giving the federal government eight to  
7 \$10 billion a year to operate out there and revenues  
8 being generated. And the federal government hasn't  
9 seen fit to invest a significant amount of that money,  
10 as I say to the goose that's laying the golden egg, to  
11 keep it going and operating so we can do the things,  
12 the great things, that the companies here are telling  
13 they are ready to spend billions and billions, and hire  
14 thousands and thousands of people and we're short on  
15 that end. Thank you.

16           MS. GAUTREAU: That's a lot -- I'll limit my  
17 response, in terms of what the federal government is  
18 doing to help restore and protect the coast of  
19 Louisiana. And (inaudible), partners in many respects.  
20 I will (inaudible) the funding for infrastructure --  
21 part of that infrastructure being the coastal platforms  
22 and (inaudible) activities. We need that constant --  
23 we need a steady predictable revenue source in order to  
24 timely implement projects in the master plan. There  
25 are existing policies that I think we could probably

1 look at. Just as an example, (inaudible), because they  
2 are one of our partners, but they have a residual fish  
3 habitat component in their regulation and sometimes it  
4 looks like it's a little challenging that we have to  
5 explain why. Perhaps changing the fishery (inaudible).  
6 We have (inaudible) policies that could be addressed to  
7 maybe not lose (inaudible).

8           So I think between our revenue source,  
9 looking at programs that we have, that could be perhaps  
10 better coordinated and some -- cross these expedited in  
11 terms of looking at these restoration (inaudible)  
12 projects that would probably be very helpful.

13           MR. GORMAN: I think much like (inaudible)  
14 comments. Pipeline (inaudible) highly regulated by the  
15 government, whether it's on the (inaudible) or whether  
16 it's on the operation side (inaudible). And so I  
17 would -- I think a couple of things that the federal  
18 government would continue to do. I want to ensure that  
19 we have a rate structure. (Inaudible) construction  
20 site with all the new construction that needs to be  
21 done. To -- for those permitting activities  
22 (inaudible) to help us prevent (inaudible). And that's  
23 a big challenge, I think for the next panel  
24 (inaudible). And I think that's one of the challenges  
25 that (inaudible). Just as our (inaudible) is

1 increasing. Obviously (inaudible).

2 MR. BORNE: First, I think we need to  
3 articulate as a nation a (inaudible). We have a policy  
4 here the federal reserves put in, for (inaudible)  
5 purposes. We have the Department of Homeland Security  
6 that protect us against terrorist threats the best they  
7 can. But we do not have a clear, coherent, and concise  
8 policy when it comes to energy. And I think one of the  
9 (inaudible) of that policy has to be recognition, that  
10 we are heading toward renewable fuels and (inaudible)  
11 ways to generate energy, but the bridge to (inaudible).  
12 And that bridge is going to be paid mostly with natural  
13 gas.

14 We need to recognize the potential that  
15 fracking gives America to become truly the world's  
16 leader in terms of manufacturing once again. And we  
17 should not impede fracking with regulations that send  
18 it offshore or put it into some sort of a pause.

19 Second, we need the realization by the  
20 federal government that some areas of this country are  
21 on (inaudible) and (inaudible). Louisiana happens to  
22 be on the (inaudible) and we're proud of it. The  
23 fellow in New York, would say, "Why do you live in  
24 Louisiana?" I would say, "You live a lot closer to  
25 Louisiana than you think because when you crank your

1 engine when you get in your Lexus to go down to Wall  
2 Street to trade hedge funds, you're starting it with  
3 gasoline that's been refined in Louisiana." I'd tell  
4 him when he takes his daughter to the emergency room to  
5 get the emergency injection antibiotic that's in the  
6 plastic bag that was made by a chemical company in  
7 Louisiana. So I live in Louisiana because I like to  
8 help you people up there in New York.

9           We want to be treated the way our inland  
10 state neighbors and brothers and sisters are treated.  
11 They get 90 percent of the royalties and the -- the  
12 rents and the leases that (inaudible) inside of their  
13 states. Why can't a Gulf state, like Louisiana, just  
14 get the same deal? We're not asking for a special  
15 deal. We just want a fair deal. If you gave us that  
16 money and you let us or whoever you want to designate,  
17 come up with an infrastructure plan that would address  
18 the issues that are being raised at these hearings  
19 today. I think we've got the brain power to do it. If  
20 you want to nominate a national infrastructure  
21 (inaudible). If you recognize that we need the  
22 equivalent of an interstate highway system concept --  
23 concept rolled into an infrastructure plan that would  
24 develop what we need to accommodate what -- by all  
25 (inaudible) generational shift in America

1 manufacturing. That is what I (inaudible) lobby for.

2 Thank you.

3 MS. WELSH: All good recommendations and  
4 we'll certainly take these back to the task force. I  
5 asked the last panel and I'd like to ask you all the  
6 same because your industries are really stepping up.  
7 Are there public/private partnerships that you have  
8 formalized with government to address the challenges of  
9 the region?

10 MR. FALGOUT: Being a bit familiar as the  
11 chairman of the LA-1 Coalition since its inception, you  
12 know, we have looked at every -- we like to say, no  
13 leaves unturned, and looked at every opportunity to try  
14 to place a major infrastructure improvement (inaudible)  
15 partnerships are certainly out there, and you hear  
16 about them. And, you know, we have been more than  
17 willing to pull ourselves to build major  
18 infrastructures, pay our way, but the federal  
19 government has not been so active in that -- in that  
20 arena. And I really believe with a little help from  
21 the government, many opportunities exist in  
22 public/private partnerships that wouldn't be on the  
23 balance sheet if the federal government would allow  
24 major infrastructure upgrades to occur, but we just  
25 haven't gotten there yet. And I think that's one thing

1 the federal government could focus on to facilitate  
2 that happening.

3 MS. WELSH: Anybody else have comments?

4 MR. GORMAN: I think a lot of the other  
5 speakers have talked about (inaudible) infrastructure  
6 and I certainly think that -- that that's a major issue  
7 as we work with the federal government and private  
8 companies (inaudible) coast. Most of our pipelines are  
9 buried. We don't necessarily sustain damage to the  
10 pipeline (inaudible), but we do have the ability to is  
11 some more along our (inaudible) station and pumping  
12 stations.

13 We have (inaudible) work hard in the last  
14 decade to strengthen us (inaudible) resilient. We  
15 moved much of our pumping (inaudible) and that type of  
16 thing. (Inaudible.) But the reality is is that we  
17 can't have enough (inaudible) generation (inaudible) to  
18 totally (inaudible) Gulfcoast. So I think that  
19 (inaudible).

20 MR. BORNE: Well, I think you're listening  
21 and that's the most important thing. You have two  
22 major government departments down here and they are all  
23 taking notes and I think that's important.

24 For the chemical industry right now, all  
25 politics are local and we're encouraging the various

1 counties, or parishes we call them in Louisiana, to get  
2 together on simple road infrastructure improvements  
3 because the future is right now when it comes to the  
4 (inaudible).

5           There is a huge cannonball that's moving  
6 through a python and that cannonball is the engineering  
7 and design that's going on in huge companies to design  
8 and build \$16 billion worth of investment and that  
9 (inaudible) in Jefferson Parish. When that python  
10 decides to pass that cannonball, believe me, you're  
11 going to see infrastructure (inaudible), like you  
12 wouldn't believe.

13           So our immediate need is to get our parishes  
14 up and down the river to begin thinking about this as  
15 soon as possible. Help us move traffic so that we can  
16 get there and build and then plans some more building  
17 (inaudible) modernized and have rail, water, road, and  
18 bridge type of infrastructure that it needs. And to  
19 the extent that the federal government can help us with  
20 a few shekels here and there, that would be  
21 appreciated.

22           MS. WELSH: And don't forget, there are  
23 members of the White House here as well. So we are  
24 listening and we sincerely appreciate your input.  
25 We're out of time, but let me offer up, if you all have

1 any final thoughts to give to the task force, now is  
2 your chance.

3 MR. BORNE: I didn't know the White House was  
4 here. I thought the President (inaudible) in the  
5 College World Series is a pretty good bet, that's LSU.  
6 So if he's putting (inaudible) with the World Series  
7 tell him pick the Tigers, he'll do okay. No disrespect  
8 to our friends from the University of Louisiana. LSU  
9 is going to go to (inaudible).

10 MS. WELSH: The office of science and the  
11 (inaudible) policy is part of (inaudible).

12 MR. GORMAN: I think I'd like to (inaudible)  
13 because that's exactly what is happening. Based on our  
14 forecast, as much of the domestic production has  
15 increased in the last five years, we're projecting an  
16 additional (inaudible) increase in production between  
17 now and (inaudible). So I would say the one thing that  
18 we don't necessarily have (inaudible), it's not only  
19 that we have to advance (inaudible), we have -- we have  
20 to (inaudible).

21 MS. GAUTREAU: I would just add that the  
22 importance of energy partnership that we see is with  
23 the energy sector in (inaudible) in Louisiana  
24 (inaudible) probably owned with Conoco Phillips being  
25 the largest land owner at 640,000 acres, I believe.

1 And we have been partnered with them as well as other  
2 companies. And if there is a way to consider --  
3 incentivizing restoration in some way that could  
4 contribute to the restoration of our coastal  
5 (inaudible) perhaps relieve the burden (inaudible).

6 MS. WELSH: Mr. Falgout, final word?

7 MR. FALGOUT: Well, (inaudible) let the  
8 cannonball roll. (Inaudible) south Louisiana more than  
9 likely because of the things that were said here today  
10 and I hope the government understands that, you know,  
11 all areas are not created equal and some have things  
12 that they do better and in the investment is in place  
13 here in coastal Louisiana.

14 Do we have problems, yes, indeed. And -- but  
15 the -- I think at the end of the day it's well worth  
16 investing in. It's very clear that the energy industry  
17 will be a major part of the economic recovery of the  
18 vitality of this country into the future and what  
19 better place than to invest your dollar then the area  
20 that will allow and facilitate and make things more  
21 efficient (inaudible) in this country. And those are  
22 the things that I think we all should support. Thank  
23 you.

24 MS. WELSH: I believe you all have provided  
25 much food for thought and we appreciate it. Please

1 join me in thanking this wonderful panel.

2 (Applause.)

3 MS. WELSH: All right. So let's get started,  
4 no time to waste. We have one concluding panel and  
5 then we're going to open it up for public comments.  
6 Remember if you'd like to speak today, you do need to  
7 sign up in advance so we can call your name out  
8 correctly. If you have not done so, please see the  
9 folks at the sign in table. For those listening in by  
10 live stream, we want your comments as well.

11 All right. We have one last panel before we  
12 open the mics for comments and that is focused on  
13 workforce development for economic developmental  
14 region. And we've heard a lot about it already from  
15 other panels today, but we'll focus a little bit more  
16 on it during our last conversation.

17 Let me introduce our stellar panelists.  
18 We've got chancellor Earl Meador, who is chancellor of  
19 Fletcher Technical Community College. Tiger Hammond,  
20 the president of the Louisiana State Building &  
21 Construction Trades Council and president of the  
22 Greater New Orleans AFL-CIO. He's doing double duty  
23 today. Mr. Stephen Barnes, director of the LSU  
24 Division of Economic Development. Ben Billings,  
25 president and chief executive officer of the Offshore

1 Marine Service Association. And Dean Mark Zappi,  
2 College of Engineering and director of the ULL Energy  
3 Institute. Let me thank you all for coming and,  
4 Mr. Meador, take it away.

5 MR. MEADOR: Thank you very much. I  
6 appreciate the opportunity to speak today. As with  
7 many of these things, with many of these type of  
8 programs you'll find that the (inaudible) in the needs  
9 of what the discussions has been about. Today's one of  
10 those days. Because if we listen to the previous  
11 panels, we see that education clearly touches each and  
12 every area that we discussed this morning.

13 And that's why it's a unique position I find  
14 myself in today as the chancellor of Fletcher Technical  
15 Community College. I'm also the director of South  
16 Central Louisiana Technical College. So most of the  
17 region of Louisiana we talked about today, we have  
18 campuses that serve one or the other. And some of the  
19 people that spoke today talked about some very  
20 important things that go on that we're involved in.

21 And energy has changed our lives, it's no  
22 longer on the job training. We know that many of the  
23 oil industry people that grew up working refineries and  
24 chemical plants and offshore industry, they learned on  
25 the job. There was no education requirement. They

1 went to work many times, I know myself, my first job  
2 was 15, 16 years old offshore the bays of the bayous in  
3 south Texas. The world has changed though. My father  
4 worked at the refinery. He was (inaudible) in World  
5 War II. Things have changed.

6           So we see a problem starting to develop. A  
7 couple starts in our workforce training and that's what  
8 the (inaudible) in the state of Louisiana are trying to  
9 address that need. And (inaudible) two of the 13  
10 colleges. They're likely to go to colleges that have  
11 the same focus in mind to start meet the needs of the  
12 workforce of Louisiana. Because we're not just talking  
13 about (inaudible) jobs. (Inaudible), but it's a  
14 widespread need for workforce training in our state  
15 that we have to (inaudible). (Inaudible) finance,  
16 (inaudible) it's all of the above topics. We cannot  
17 focus on this one area because they're all going to be  
18 related, it's a complex issue to train the workforce we  
19 need. (Inaudible) across our state because Louisiana  
20 is an energy state at all levels.

21           And I was thinking earlier (inaudible)  
22 speaking to the (inaudible) association, they are a  
23 part of this whole discussion involved (inaudible).

24           At our Reserve campus, we have almost 500  
25 students training to work in the river region

1 industries, chemical plant and manufacturing and  
2 chemical processing. We have people training in all  
3 kinds of other stuff. (Inaudible) we have a deepwater  
4 (inaudible) for training workers to work offshore. A  
5 multimillion-dollar investment that's (inaudible) to  
6 make this happen. (Inaudible) we just opened the doors  
7 a few months ago, (inaudible) explore what this means  
8 for Louisiana (inaudible) expand it and (inaudible) to  
9 develop the workforce as needed in this area.

10 Coastal (inaudible) going to need two-year at  
11 least in your training. (Inaudible) there are many  
12 jobs, (inaudible). We have a safety training center  
13 that turns out almost 4,000 students a year just in  
14 basic safety training to go to work offshore. And it's  
15 all of the above required to meet the needs of  
16 Louisiana as we start to go through this.

17 So I'm going to take the last of my time to  
18 focus just a moment on Deepwater Center of Excellence  
19 and what that means in Louisiana. Education is the key  
20 to start (inaudible) workforce. Over 11 years the  
21 Louisiana (inaudible) the way into training the  
22 technical workforce of Louisiana. As industry  
23 manufacturing increased (inaudible) to the colleges  
24 appropriating (inaudible). What that means is that as  
25 educators we're required to adjust and change and adapt

1 as the industry requires it. Because if we're not  
2 changing and adapting to the industry (inaudible). So  
3 in (inaudible) we are constantly reaching out and  
4 touching and working with our businesses (inaudible)  
5 behind. So that's very important. That's what the  
6 Center of Excellence is all about. It's about reaching  
7 out to the communities and the energy industry and all  
8 of us, as we begin to explore what the Center of  
9 Excellence is all about (inaudible). We need to expand  
10 our partnerships (inaudible). Because we cannot remain  
11 static because the industry (inaudible).

12           We focus on (inaudible) upstream sector. As  
13 I said earlier we have campuses that focus on other  
14 areas and all of the above as we start to develop our  
15 workforce (inaudible). We talked about building that  
16 workforce. We have -- we have students from five  
17 different states in the program (inaudible). One of  
18 our safety trainers (inaudible) 14 states, here in  
19 Louisiana to train (inaudible) go to work offshore.  
20 (Inaudible), that's what we're dealing with. It's not  
21 just about Louisiana. (Inaudible) Louisiana  
22 (inaudible), Lafourche Parish (inaudible) and I get a  
23 great place to live. It's really not (inaudible). And  
24 you see 14, 15 states represented that means that's 14  
25 or 15 families that are supported by the energy

1 (inaudible). So all of the above matter.

2 All of the above are impacted by the decision  
3 we make. We should consider that. Our current program  
4 (inaudible) that we put (inaudible) graduates out in  
5 the spring at Fletcher. We're going to have over 200  
6 students enrolled in the fall. (Inaudible) the other  
7 side, our Reserve campus, working with the (inaudible)  
8 along the river region, we've got almost 500 students  
9 enrolled in that program. (Inaudible.) All of this is  
10 tied together. It would be easy to separate.

11 (Inaudible) while they seem separate, they're not,  
12 they're interrelated. There's upstream and downstream.  
13 Still the -- still the same workforce (inaudible) and  
14 the construction industry (inaudible) and Louisiana,  
15 the bayou region, the coastal region, they need  
16 construction workers in the shipyards, many of those  
17 are the same workers (inaudible) and the construction  
18 manufacture. Again, it's all tied together.

19 We have to really approach it from all of the  
20 above (inaudible) the behind the (inaudible). It's  
21 important that we realize that and that's where the  
22 college as a whole (inaudible) to reach out to the  
23 industries in Louisiana (inaudible) sector. As we  
24 start to work (inaudible). We have to recruit  
25 nationwide. We have to (inaudible) made impact because

1 there are people (inaudible) that won't work in south  
2 Louisiana. And if you ever walked (inaudible) all over  
3 the city and all over the United States. And  
4 (inaudible) they'll work offshore for four weeks and  
5 they come home (inaudible) and they fly back home.  
6 That's important. Again, very important that we all  
7 work together on this to discuss (inaudible). Thank  
8 you.

9 MS. WELSH: Thank you. Mr. Hammond.

10 MR. HAMMOND: Thank you very much. Hello,  
11 I'm Robert "Tiger" Hammond, the president of the  
12 Louisiana Building & Construction Trades Counsel  
13 (inaudible).

14 MS. WELSH: Can you move the mic closer to  
15 your mouth so she can hear.

16 MR. HAMMOND: That comprise over 14 national  
17 and international unions (inaudible). I want to thank  
18 first, Secretary Moniz and Mary Landrieu for providing  
19 the electrician that showed up (inaudible) put the  
20 lights back on. I'm (inaudible) program (inaudible),  
21 but I want to thank Secretary Moniz and Senator Mary  
22 Landrieu for this opportunity today, just to be on this  
23 important panel.

24 I was going to use a PowerPoint, but that's  
25 all right. I'll just go ahead and read it off the

1 paper.

2 MS. WELSH: Well, your presentation will be  
3 posted on the webpage.

4 MR. HAMMOND: Okay. (Inaudible) over the  
5 next 10 years of the Gulfcoast region will require  
6 (inaudible). Unfortunately, the great recession of the  
7 past seven years ending (inaudible) for the US  
8 construction industry. In fact, it was flat out  
9 impression that the -- that the construction industry  
10 that we have (inaudible) in 2010. Even today the  
11 national unemployment rate for construction is still  
12 around the same. The last time our unemployment  
13 numbers were below (inaudible) was the summer of 2007.  
14 What this means is that many skilled craft  
15 professionals have simply left our industry and  
16 (inaudible) whole generation of baby boomers are set to  
17 retire in the next five to 10 years, it's easy to see  
18 that we are heading towards the perfect storm in terms  
19 of skilled (inaudible) in this region.

20 Overcoming these challenges will require --  
21 will require a sophisticated and well-rounded approach  
22 to work with the government. One that puts aside  
23 (inaudible). We need (inaudible) associated  
24 apprenticeship infrastructure that is funded and  
25 operated by the infrastructure industry. (Inaudible)

1 to the tune of roughly \$1 billion every year, a  
2 nationwide network of 1600 local (inaudible) program  
3 called (inaudible), apprenticeship training committee  
4 as we call it. Let me repeat our members and our  
5 contractors will invest \$1 billion every year to  
6 operate our training center and no tax money -- no tax  
7 payer money involved.

8           When you factor in the wage and the benefits  
9 that are paid to (inaudible) our the annual investments  
10 and you (inaudible) across the United States it exceeds  
11 \$10 billion a year. In the Gulfcoast region alone  
12 (inaudible) the workforce development approaches  
13 \$100 million every year. Today we operate 250 training  
14 centers in the (inaudible) states from Florida to Texas  
15 and there are slots for 35,000 apprentices. In this  
16 region alone, we also maintain 50 mobile training  
17 centers that can be located to remote areas and on job  
18 sites that require special ops training. We operate  
19 over a thousand local groups across the Gulf region and  
20 our instructors are the best in the business and they  
21 are fully qualified (inaudible). And we'll go to work  
22 to further this capacity.

23           Right now this union is construction  
24 (inaudible) state of the art training center, right  
25 here in Louisiana. You can see it right there as you

1 pass it on Interstate 10 at William. The pipe fitter  
2 and plumbers are building a (inaudible) in Lake Charles  
3 that will (inaudible). The training facility in Lake  
4 Charles (inaudible).

5 In each instance, the facility will be a  
6 (inaudible) American Welders Society of Certifications.  
7 I (inaudible) three additional trailers, welder  
8 machine, (inaudible) to provide additional training,  
9 certification (inaudible) at training centers and  
10 off-site locations across the Gulfcoast region.  
11 (Inaudible) the Workforce Commission have currently  
12 2,414 people enrolled and registered in construction  
13 (inaudible) programs across our state. Of those,  
14 86 percent of them are enrolled (inaudible). Funded  
15 and operated by a union, (inaudible), 86 percent. We  
16 do believe in training. And each year we provide  
17 advanced training (inaudible) and each year they are  
18 continuing to improve their (inaudible) skills to meet  
19 the ever changing need for the demand (inaudible). And  
20 our learning approach is good from the bottom line  
21 (inaudible) and working with state and local  
22 governments.

23 Remember our training program (inaudible)  
24 abundant, no tax payer money involved and our  
25 apprentices do not pay tuition. We pay them. In fact,

1 a study by the Washington State (inaudible) that a  
2 return on (inaudible) by tax payers (inaudible) was  
3 substantially higher for any other workforce training  
4 program, including community college. Economic  
5 benefits (inaudible) governed by union instruction  
6 industry greatly outweighed those associated with  
7 community college, web training education. 42 -- 42  
8 (inaudible) community college have (inaudible) and  
9 necessarily have a curriculum (inaudible) and expertise  
10 to boost qualified state (inaudible) professionals.  
11 (Inaudible) articulate the (inaudible) programs of the  
12 apprentices who complete their training they will also  
13 earn college credits (inaudible).

14 We have great examples of this high-tech  
15 program (inaudible), we have apprentice returning  
16 journeymen level status and associate degree at the  
17 same time. On the other hand, our (inaudible) and  
18 funding and operating (inaudible) arguably the most  
19 exceptional education system in the United States.

20 Today throughout the south of the Gulfcoast  
21 (inaudible) protecting our (inaudible) to operate  
22 (inaudible) to name a few. We also have a proud and  
23 distinguished history of conducting the maintenance  
24 work on the facility (inaudible) prominent names in the  
25 energy industry. (Inaudible), among many others. Why

1 are these companies (inaudible) because they know  
2 (inaudible) professionals working on their projects  
3 (inaudible) interns training (inaudible). We have  
4 proven that we do -- what we do works well and we have  
5 the infrastructure capacity. Sure we can't do it  
6 alone, but before the (inaudible) Workforce Commission  
7 provides. Give us a change and (inaudible) at this  
8 table and thank you for providing me this opportunity  
9 today and (inaudible) discussion.

10 MS. WELSH: We're going to keep this dialogue  
11 going. Thank you so much. Mr. Barnes.

12 MR. BARNES: Thank you. I'm the Director of  
13 the LSU Division of Economic Development (inaudible).  
14 We are an applied economic research group and the  
15 (inaudible) at LSU.

16 MS. WELSH: Can you pull the mic down?

17 MR. BARNES: And what I'd like to focus on  
18 today is talking a little bit about trying to quantify  
19 and characterize the workforce challenges ahead. And  
20 specifically, as that relates to a project we've been  
21 working on with Louisiana Workforce Commission for  
22 about five years now. So I do have some slides, I tend  
23 to get a little carried away with numbers sometimes,  
24 but I'll try to keep my feet on the ground with some --  
25 with some (inaudible) here.

1 MS. WELSH: Just remember, five minutes.

2 MR. BARNES: Absolutely. That's what the  
3 slides are for. So -- so the project that we've been  
4 working on is part of the local employment protections  
5 program, which is funded by (inaudible) Administration  
6 and the goal of that effort is to create forecast of  
7 employment, short-term (inaudible) and long-term  
8 (inaudible). And the, you know, in Louisiana we do  
9 things a little bit differently.

10 Really after Hurricane Katrina we realized  
11 that the standard approaches with forecasting  
12 (inaudible) fell very short and that was due to the  
13 inability of not one size fits all approach to account  
14 for the wild fluctuations of employment (inaudible)  
15 Hurricane Katrina. So we moved the Workforce  
16 Commission in Louisiana, began working with (inaudible)  
17 to try to develop some alternative models, as well as  
18 expand the process (inaudible). And the key component  
19 of that is reaching out (inaudible) 150 largest  
20 employers in the state. But that gives us kind of an  
21 unique inside (inaudible) challenges facing employers  
22 of the state and really sets the stage for us to have,  
23 what I think is going to be a very useful tool, for  
24 understanding the energy workforce challenges that  
25 we'll look at it in a second.

1           So we've heard some discussions already today  
2 about sort of the -- the background of the energy  
3 workforce both as (inaudible) baby-boomer retirement  
4 trend that we're seeing generally across the economy.  
5 The fact that's further complicated by the -- the sort  
6 of gap in the workforce, lost generation some would  
7 call it, it was created by the oil bust in the 1980s.  
8 And so we're at the point where the workforce community  
9 sector have already been under significant pressure and  
10 now we're faced with this enormous opportunity  
11 (inaudible) throughout (inaudible). But to put it in  
12 perspective, you know, what the challenges are, what  
13 (inaudible) distribution and that's (inaudible) market.

14           I want to back up a little bit and sort of  
15 focus in on some other pieces that you've heard  
16 mentioned already, which is the upstream growth, that  
17 we've already seen, which has sort of soaked up a lot  
18 of slack in the labor market. So (inaudible) more  
19 activities and (inaudible) has more than doubled from  
20 2003 to 2013. And when you look a little deeper into  
21 that data you see that average hours have gone up, back  
22 in 2003 it was already (inaudible) 45 hours, that's  
23 crept up even higher, an average of 48 hours a week.  
24 And wages have gone up as well. So we see a tight  
25 market (inaudible) you've already seen and we're at the

1 beginning edge of a (inaudible) heard about today. So  
2 that's going to put a significant additional pressure  
3 on the workforce.

4           And so when you think about that (inaudible)  
5 the transportation and distribution, you're (inaudible)  
6 to the labor marked kind of last in line. So a lot of  
7 the slack has been taken up already. There's going to  
8 be a lot of competition in the future. So what -- what  
9 exactly are the applications we're looking at? This is  
10 a list that's too long to read through all of it, but  
11 what we're looking at here is coming out of  
12 (inaudible). So this is all the top applications  
13 (inaudible) transportation -- transmission and storage  
14 industry, which is primarily highway transportation in  
15 Louisiana. Also, could be rail and truck. And you do  
16 see some things that you would expect, civil engineers,  
17 pipe fitters, welders, but I think the other thing  
18 (inaudible). This is just a selection of those  
19 applications. (Inaudible) story and realities you get  
20 (inaudible) more complex. So -- so, you know, the  
21 first (inaudible) you think (inaudible) is the jobs  
22 that you need to train people, but it turns out to be a  
23 much longer list.

24           And then further complicating this is the  
25 fact that we know that businesses in the (inaudible)

1 not only those upstream and downstream industries, but  
2 a pretty decent set of other (inaudible). So when we  
3 look at other industries that have high concentrations  
4 of the same types of workers, (inaudible) folks getting  
5 some oil and gas (inaudible) would expect, but also  
6 getting things like (inaudible) manufacturer.

7           Then very briefly, just want to show you a  
8 couple of examples that we can sort of look at.  
9 (Inaudible), so if you look at civil engineers, you can  
10 see that -- that sort of that primary transmission,  
11 distribution sector that we (inaudible) think of focus  
12 today (inaudible), which shows up, you know, well under  
13 five percent (inaudible) civil engineers (inaudible) in  
14 the area. But a lot of the services are going to be  
15 contracted out to those professional (inaudible).

16           So there are some resources available.  
17 There's a lot of stiff competition from other  
18 industries and then a different looking picture, you'll  
19 see like mechanical engineers, where you see a lot of  
20 employment (inaudible). So one last example would be  
21 pump operator (inaudible) of the sector, but at least  
22 in Louisiana there's a lot of competition elsewhere in  
23 manufacturing. So these workers are already hard to  
24 come by (inaudible) competition down here.

25           MS. WELSH: Thank you very much.

1 Mr. Billings.

2 MR. BILLINGS: Hi, my name is Ben Billings.  
3 I serve as president over the Offshore Marine Service  
4 Association. I also want to extend my thanks to  
5 Senator Landrieu and Secretary Moniz for the  
6 opportunity to be here today. I also represent the  
7 maritime support side of the offshore oil and gas  
8 sector. Out of approximately 250 member -- companies  
9 that include vessel owners and operators, shipyards,  
10 include the manufacturers and professional (inaudible)  
11 servicing the oil and gas industry in the Gulf of  
12 Mexico and around the world. So on behalf of the 1200  
13 vessels and 12 dozen workers, including our membership,  
14 thank you for the opportunity to share our thoughts on  
15 the (inaudible) domestic energy industry and the  
16 thoughts of expert initial growth and job creation.

17 As it's been alluded to by some of the other  
18 panelists earlier today, hydraulic fracturing,  
19 fracturing new technology (inaudible) to dramatically  
20 boost (inaudible) onshore in the US. However,  
21 one-fifth of America's domestic energy is produced  
22 offshore. Getting that product to the market requires  
23 thousands of highly specialized vessels and crew  
24 members who are trained to safely operate. These  
25 vessels conduct seismic research, drill test wells, lay

1 pipe, transport, install, and decommission production  
2 platforms and provide (inaudible) and continuously  
3 supply offshore facilities with food, water, personnel,  
4 fuel, equipment, and tools, drilling (inaudible) and  
5 various other goods and services.

6 Louisiana, in fact, is the number one  
7 maritime state in the country, in terms of jobs. We  
8 are also number third shipbuilding state and just as  
9 offshore drilling technology was born here off the  
10 coast of Louisiana, so was the offshore vessel supply.  
11 So in addition to also fossil fuels the Department of  
12 Interior has overseen (inaudible) the large lease of  
13 the Atlantic for offshore (inaudible) development as  
14 well. The offshore (inaudible) off the coast of  
15 Massachusetts provides Delaware, Maryland, and Virginia  
16 require additional vessels and crew members to support  
17 renewable energy development the Atlantic.

18 So as you navigate the infrastructure needed  
19 to support energy production needed in America, please  
20 bear in mind that the fleet of offshore workers and the  
21 mariners who crew them, as they are a vital part to the  
22 supply chain in this country. The part of Louisiana  
23 (inaudible) Louisiana coalition or one of every six  
24 jobs in Louisiana relies directly on the oil and gas  
25 industry and the (inaudible) crude oil (inaudible) and

1 producer of natural gas in America.

2           We've heard a lot about the low unemployment  
3 rates and the southern portion of the state. The  
4 energy industry has created thousands of good paying  
5 jobs here in Louisiana with opportunities for career  
6 advancement. In fact, if you drive just an hour south  
7 of New Orleans you begin to see billboards almost every  
8 500 yards that say, "Now hiring," so (inaudible) pull  
9 their car to side of the road, come inside, and apply  
10 for a job.

11           So very (inaudible) the unemployment rate as  
12 low as it is in Lafourche, Terrebonne, and other  
13 southern parishes in Louisiana and the rest of the Gulf  
14 region, in large part because of the opportunities of  
15 the energy industry is providing our families at this  
16 point of the world. So this panel obviously focused on  
17 workforce needs in order to meet the energy needs of  
18 the nation and we must address the workforce needs of  
19 the domestic maritime industry that is engaged in oil  
20 and gas support. Part of that challenge -- let's talk  
21 about two or three initiatives (inaudible) try to meet  
22 those needs. Part of that challenge is to prepare the  
23 next generation of managers to oversee safety  
24 operations, training, and regulatory compliance in the  
25 industry. To that end several (inaudible) companies

1 partner with Nicholls State University, which is  
2 located in Thibodaux, Louisiana to establish a  
3 concentration in maritime management within the  
4 undergraduate college of business and also to provide  
5 internships to students of the program so they can  
6 satisfy their career requirements and being a career in  
7 the maritime industry.

8           Specialized state funding and (inaudible) and  
9 internships provided by the industry make this a model  
10 collaboration between government, academia, and the  
11 private sector to educate leaders in maritime  
12 management and create a one of a kind (inaudible) other  
13 parts of the country to Louisiana. The domestic  
14 maritime industry is also targeting (inaudible) to  
15 address its workforce through the transportation  
16 institutes, military and mariners initiative, maritime  
17 (inaudible) are hosting a job fair, actually coming up  
18 on June the 4th in Jacksonville, Florida after hosting  
19 a similar event Puerto Rico last year. The industry is  
20 also working with Congress and the Coast Guard to also  
21 make it easier for military vets to receive credit for  
22 their time at sea aboard military vessels as part of  
23 their qualification for merchant (inaudible)  
24 credentials to serve aboard commercial vessels after  
25 they leave the service.

1           Last (inaudible) I'll mention is within the  
2 South Central Industrial Association, which none of the  
3 folks in this room are involved with and we're just  
4 taking a leadership role. (Inaudible) to work in the  
5 Louisiana program. This is a program designed interest  
6 to high school students and young adults (inaudible)  
7 careers and (inaudible) training opportunities and new  
8 employers. Working in Louisiana has a greater  
9 marketing and awareness plan nursing current employment  
10 needs in the bayou region. The long-term goal is to  
11 continually provide information to the student  
12 population on the job opportunities, education, and  
13 training requirements along with (inaudible)  
14 expectations. Designed to encourage the student  
15 (inaudible) to take pride in their chosen career path.  
16 The program also includes (inaudible) classroom career  
17 videos, career day events at schools with businesses,  
18 career linking us, connecting junior high schools and  
19 technical colleges and local businesses as well as  
20 business generated speaker (inaudible). So these are  
21 just a few of the -- few examples of initiatives that  
22 are happening in the Gulf region within the maritime  
23 sector to meet with workforce needs of this vibrant and  
24 growing supportive base for the nation's energy  
25 industry.

1                   And this last thing, I talked about some of  
2 the (inaudible) initiatives that are underway to kind  
3 of make sure we feed the pipeline for the necessary  
4 (inaudible) that we are going to require to support  
5 offshore energy development. Also, just a brief  
6 statement, there is a little concern with the  
7 international and federal requirements to become  
8 mariners. These credentials are increasingly growing  
9 more difficult, more expensive, and more time  
10 consuming, so as the marine industry seeks to replenish  
11 and grow its (inaudible) so that it can service  
12 offshore rigs and supply energy to the marketplace, we  
13 need to be cautious about (inaudible) and barriers to  
14 entering the deterred qualified applicants to work  
15 offshore or make it prohibitive for small businesses to  
16 hire or maintain quality people. Thank you again for  
17 the opportunity to contribute to this.

18                   MS. WELSH: Thank you. Dean Zappi.

19                   MR. ZAPPI: Is my mic on? Okay, good. I'd  
20 like to start by thanking Secretary Moniz and Deputy  
21 Secretary Connor for their leadership, for the  
22 organizing of this (inaudible) and board meeting. Most  
23 importantly I want to thank our great Senator Landrieu  
24 for her service to our country and working so hard to  
25 keep the United States energy secured. However, as a

1 Louisiana citizen, I also want to thank her for her  
2 great efforts in insuring that Louisiana truly remains  
3 an energy state.

4           The energy infrastructure represents so many  
5 facets that we could talk about today. I will address  
6 workforce needs in a moment, but first I'd like to  
7 address a few key issues as I wear my hat as the Energy  
8 Institute Director that I think are deemed worthy of  
9 mentioning with regard to technology infrastructure.

10 First, I believe we need an increase (inaudible)  
11 funding for petroleum and energy research. The funding  
12 for this topic has increased dramatically for sometime  
13 at the federal level. We have so many great  
14 opportunities for developing and optimizing the  
15 petroleum based technologies that will make this energy  
16 resource safer, cleaner, and cheaper. Oil prices are  
17 likely to steadily increase over time. Hence  
18 transportation fuel prices will also increase unless we  
19 aggressively focus on our efforts on developing and  
20 optimizing (inaudible) transportation fuels (inaudible)  
21 resource and that's natural gas.

22           A good example of a natural gas (inaudible)  
23 transportation fuel that I think has tremendous promise  
24 is gas to liquids or GTL, which is becoming a model  
25 industry leader for the state of Louisiana for so many

1 entities like (inaudible) in our great state. While a  
2 lot of discussions today have been likely directed  
3 toward toward the petroleum industry, we cannot  
4 overlook (inaudible) longterm opportunities that  
5 renewable energy technologies represent.

6           For far too long renewable energy development  
7 has been somewhat price driven. Driven by high oil  
8 prices. Driven by so many outside factors. I urge us  
9 to take advantage of this (inaudible) to fully develop  
10 (inaudible) energy options. This is our time to do  
11 this right. With regard to providing future energy  
12 professionals and advancing our portfolio of energy  
13 options, I suggest that we offer more than university  
14 (inaudible) opportunities, using federal funding that  
15 involves improving petroleum based technologies like  
16 GTL fuels and deepwater drilling. Unleash the power of  
17 university and energy collaborations. I'm telling you  
18 it will lead to amazing results.

19           At UL we have literally doubled our student  
20 population at our College of Engineering in the last  
21 two years. In 19 -- 19 -- in 2006 we were 1150. We're  
22 going to be at 26- 2700 in the fall. That's amazing  
23 growth for a college (inaudible). We've gone from a  
24 medium size college to a large college. Now, when you  
25 compare our growth to the College of Engineering across

1 the country, we're growing at a much faster pace than  
2 some of the other colleges. In fact, if you look at  
3 Louisiana, between LSU and UL, we had the (inaudible)  
4 in the top five fastest growing college of engineering  
5 in the country.

6           The biggest complaint though as I hear as I  
7 go around the energy industry, is based on those  
8 numbers. We're not graduating enough. As proud as we  
9 are of the doubling in growth, we're still not  
10 producing enough graduates and I mean by graduates,  
11 engineers and technologists and that's (inaudible) the  
12 community colleges to meet their needs. To stay  
13 competitive in this technology driven global  
14 marketplace, we must increase numbers of students  
15 entering and finishing this (inaudible). An eye  
16 opening report (inaudible) about American College and  
17 Testing Corporation, better known as ACT, states that  
18 the number of high schoolers interested in STEM is  
19 decreasing. They found by polling students in 1996  
20 that 16 percent were interested in entering STEM  
21 fields. In 2003 they repolled the students and less  
22 six percent were now interested in STEM. That's a  
23 chilling number. We're simply falling behind. The big  
24 crude change and industry (inaudible) is coming and  
25 it's real. The average age for an engineer in the

1 energy sector is around 60 years old. I can understand  
2 why industries here today can be so concerned.

3           It's also important to keep in mind that this  
4 need for engineering talent is just not for petroleum  
5 engineers, it's all engineering (inaudible) pointed  
6 out. This (inaudible) industrial revolution in the US  
7 fueled by cheap and plentiful natural gas is not only  
8 resulted in the lack of engineering talent for the  
9 energy sector, but it is also presented a talent gap  
10 for many other industries that are tied to the energy  
11 marketplace, like the chemical production industry.

12           In fact about a year-and-a-half ago our  
13 governor, Governor Jindall, presented a workforce  
14 report that states, if we increase the graduating  
15 number of engineers by 30 percent every year, that's  
16 every year for five years, we'll only address current  
17 needs. That doesn't take into account the \$70 billion  
18 of new construction that's ongoing. I think that  
19 graduate school, particularly, the PhD degree that has  
20 now become the rich people system of innovation for --  
21 in the United States. I believe I have a federally  
22 funded energy targeted (inaudible) program that targets  
23 this -- targets this -- targets graduate students in  
24 the engineering colleges will be able to produce some  
25 of the STEM numbers that we're going to need. I'd also

1 like to increase the opportunities for under  
2 represented minorities within the STEM field. I  
3 suggest that we try some pilot studies such as  
4 facilitate two plus three programs between historic and  
5 minority institutions and the larger PhD rated  
6 institutions to grow this vital number of under  
7 represented by the (inaudible) in the STEM fields and  
8 also remember when it comes to STEM the T and the E,  
9 that's technology and engineering, females are a great  
10 under represented minority group, too, and they often  
11 forget about that.

12 In closing, again, I'd like to thank the  
13 organizers to this exciting meeting. I want to thank  
14 you for giving me the honor and for providing so many  
15 (inaudible) with this very important process. Thank  
16 you.

17 MS. WELSH: Thank you, Dean.

18 So all day we have heard about new  
19 investments in Louisiana across the region. We have  
20 heard that this region is the epicenter for our  
21 nation's energy industry in the world and the  
22 energy industry (inaudible) and we are part of the  
23 global economy, but the backbone for that is of course  
24 the workforce. If we don't have the workers, none of  
25 the other improvements will happen. You all have been

1 talking about the shortages of skilled workers, the  
2 need for more apprentice programs, the need for more  
3 PhD programs, and engineering programs. What  
4 incentives are appropriate to draw in all levels of  
5 education and you all represent kind of a different  
6 level? What -- what -- what are you all doing to  
7 incentivize students -- excuse me, from around the  
8 country and frankly from around the world to come here,  
9 learn the trades, learn the skills, get the degrees,  
10 and then stay here in the US? We hear a lot about  
11 engineering schools losing a lot at of their students  
12 back to their own countries, so the question is:  
13 What's the right level of incentives; what's the  
14 appropriate way to grow the work force at your level?  
15 Mr. Meador, do you want to tackle that?

16 MR. MEADOR: Certainly.

17 MS. WELSH: And bring your mics in close.

18 MR. MEADOR: As I said earlier, as we begin  
19 to look at the workforce we need to -- we have to look  
20 at (inaudible) wage to handle this need. The incentive  
21 we're talking about is we have to change the mind  
22 perception. I want to focus on community college level  
23 and the trades and the skill level because one of the  
24 problems we have is sometimes we will give a free  
25 training and no one shows up. That's what we do. With

1 such low unemployment rates and (inaudible). We have  
2 to change the perception. I know for (inaudible), one  
3 of things (inaudible), we were reaching back to  
4 seventh and eighth grades in some of the things  
5 (inaudible). We're reaching back and we're reaching  
6 out to younger and younger people to change the  
7 perception of what it's like to be a trade or skilled  
8 craftsman in your field. What it's like to go to a  
9 community college and receive an integrated technology  
10 (inaudible). We have to change the perceptions because  
11 what is happening in our world is -- is the world  
12 changed (inaudible). 20 to 30 years ago was on the job  
13 training, we don't do that anymore. There is some  
14 level of training in all levels, no matter where you  
15 work. You cannot go to work offshore on one of the  
16 offshore vessels without some training. It's a  
17 requirement.

18           So we're finding that we have to change the  
19 perception because (inaudible) our parents wanted us to  
20 be the first generation to go to college. My parents  
21 didn't finish high school. I come from World War II  
22 parents, they dropped out, and that was the way the  
23 world was. So it was a big thing. (Inaudible) a four  
24 year degree was the only acceptable (inaudible). We  
25 find that we (inaudible). We need to do all of the

1 above when it comes job (inaudible). We have to change  
2 the perception at all levels.

3 MS. WELSH: Thank you. Mr. Hammond?

4 MR. HAMMOND: Thank you very much once again.  
5 Well, in our apprentice program we have a self-made  
6 mechanism for incentive. As I spoke of before we don't  
7 charge tuition to our apprentices. We do it through  
8 (inaudible) our employment puts a certain amount of  
9 money into the apprenticeship program and while they  
10 learning. (Inaudible), I can tell you right here, in  
11 the New Orleans area, (inaudible). We have raised our  
12 apprenticeship just from last year 30 percent. Matter  
13 of fact, I have (inaudible) electrician apprenticeship  
14 went from -- we went form 160 apprentices last year to  
15 230 of them, 73 -- 73 more apprentices this year than  
16 last year. And the plumbing went up about 80 percent  
17 apprentices.

18 So everybody is gearing up (inaudible), we  
19 bring them to school, we don't charge them for tuition,  
20 we put them on the job, they learn from our skilled,  
21 trained journeymen on the job. They make a (inaudible)  
22 and every year provided they (inaudible) get the hours,  
23 which (inaudible) isn't hard to come by, (inaudible).  
24 They get a 10 percent increase. I tell people all the  
25 time what more of an incentive is, I'm going to use one

1 term an electrician, we don't (inaudible). You get  
2 10 percent increase on the (inaudible). Every year  
3 provided you (inaudible), you get your hours in, you  
4 get 10 percent increase based on general wage. Which  
5 our general wage today \$29.35, so approximately a  
6 three-dollar raise every year. No employer out there  
7 in this industry, every year gives you a 3-dollar raise  
8 for five years that you're in the program.

9           So we do have something (inaudible). I'm  
10 going to go back to what Earl said, we need to change  
11 the perception out there because (inaudible) they come  
12 out of high school and (inaudible), they maybe go get a  
13 GED (inaudible). They all want to be doctor, lawyers  
14 (inaudible). We need to get them back (inaudible).  
15 You can earn 60, 80, \$100,000 a year right here in New  
16 Orleans or in Lake Charles or in Lafayette for the next  
17 10, 15, maybe 20 years. And you can get (inaudible) at  
18 one of these (inaudible) coming down, you can earn that  
19 much money yearly without going (inaudible).

20           But there are incentives, we just haven't  
21 changed the mindset of these students today, which we  
22 go to job fairs and we try to tell them, 60, 80,000,  
23 \$100,000 (inaudible). And earning while you learning.  
24 We put you in our apprenticeship and we pay you for  
25 your training and we'll put you in a job. Thank you.

1 MR. BARNES: So I think first I'd like to  
2 (inaudible) that idea that part of the incentive is  
3 to -- basically advertising the opportunity to younger  
4 people and letting people know, not only that these  
5 jobs exist, but how to get into them. What's the  
6 (inaudible) steps you have to take in terms of  
7 training. So I think if you inform the future work  
8 force is a big part of it.

9 With regard to the forecast (inaudible) were  
10 the some our early feedback and (inaudible) and nobody  
11 outside of maybe four or five people were ever looking  
12 at it (inaudible). So we put together a star rating  
13 system that we would use to kind of add up the  
14 qualities of the jobs. It pays well, lots of growth,  
15 you would see a higher star rating. And so now this is  
16 (inaudible) Louisiana Workforce Commission maintains  
17 and tries to push out to young people as early as high  
18 school. But I think there's still a challenge there to  
19 try to come up with, you know, (inaudible) groups that  
20 are trying to get this message out by figuring out how  
21 to (inaudible) that message and make it -- one clear  
22 opportunity rather than sort of a fuzzy picture where  
23 (inaudible).

24 So that's the kind of things -- a big -- one  
25 of the biggest challenges is to get young people

1 interested, but I also (inaudible) financial incentive  
2 to help, subsidies or grants (inaudible) training  
3 programs. Can be one way that reduces the cost of  
4 getting through the training process or (inaudible)  
5 employers (inaudible).

6 I think from the maritime industry's  
7 perspective with regard to offshore support  
8 (inaudible), there was a lot of incentives in place  
9 already. Certainly financially, similar opportunity  
10 coming (inaudible) high school. Within four and five  
11 years you have the opportunity to be making up to six  
12 figures and if you're considering a work schedule to be  
13 two weeks on and two weeks off, to be able to skip  
14 college and only work half a year and take home that  
15 kind of pay, the -- the financial incentives are  
16 certainly are in place.

17 And I think safety is an important message  
18 that needs to be included. Making sure the people  
19 understand the safety culture permeates certainly in  
20 the shipyards and the (inaudible). In the other  
21 segments of the energy industry as well. It's -- it's  
22 at the top of the list in just about every major  
23 industrial facility in terms of making sure that  
24 workers know how to operate safety. The safety culture  
25 permeates everything that is done. That each

1 individual has the opportunity to stop work if they see  
2 something that can be dangerous. (Inaudible)  
3 overcoming any concerns that (inaudible). So the  
4 incentives seem to be in place. It's largely seems to  
5 be a marketing and -- and an outreach challenge that we  
6 have, and getting into the schools, it's usually  
7 important to be able to do it at an earlier age, you  
8 know. I think the interest incentive education  
9 (inaudible) over time and a lot of times if you wait  
10 until they're already out of high school, if -- in high  
11 school (inaudible) some of these subject matters  
12 (inaudible) job opportunities to go along with them.  
13 You may have already them (inaudible).

14           So trying to get into the schools earlier in  
15 the way that the SIA programs are designed, it really  
16 is critical. And obviously (inaudible) think  
17 (inaudible) in the greater New Orleans area since the  
18 hurricane (inaudible) some of the building trade  
19 schools, charter schools that have been opened up, that  
20 are acknowledging up front (inaudible). And they teach  
21 (inaudible) trades and have -- they teach skills and  
22 offer apprenticeship opportunities (inaudible). To see  
23 schools that take that mission on wholeheartedly and  
24 try to support the (inaudible) with the employers and  
25 apprenticeships to study that career path. And can be

1 clearly seen by someone who's 12, 13, 14 years old  
2 (inaudible).

3 MR. ZAPPI: We get asked a lot, how did we  
4 double the size of your college? And a lot of the  
5 (inaudible) we (inaudible) the United States  
6 (inaudible) and one of the things we found out kind of  
7 gets Ben's point is we go to high schools a lot to talk  
8 about what engineers (inaudible). It's amazing. They  
9 understand what nurses and doctors and lawyers do, but  
10 try to explain to them what an engineer does and  
11 (inaudible), they know you got to be good in math and  
12 know you make a lot of money, but it's not boring. And  
13 so going out there and talking to them and doing a  
14 better job of highlighting the value and exciting work  
15 engineers and technologists do is really a good start.

16 Another thing is nationally about 60 to  
17 65 percent of engineering students who start as  
18 freshmen will not graduate. The colleges of  
19 engineering has got to rethink how we educate future  
20 engineers. The trend that's happening (inaudible)  
21 finances, is we're doing away with hands-on labs.  
22 We're going (inaudible). We're going in computer  
23 screens, simulators. That doesn't excite the student.  
24 They want to touch things and one thing we've done even  
25 though it's been extensive is to work hard to add more

1 hands-on activities for our students. In fact, we  
2 initiated a very rigorous undergraduate research  
3 program that has had amazing results in retaining the  
4 top performing students. So let them go out there and  
5 touch things.

6 I also, in my comment on (inaudible) was  
7 something you said. I want to highlight that state  
8 (inaudible) for four internationals (inaudible)  
9 receiving engineering PhDs, NSF found that 10 years  
10 after getting there PhD about 70 percent were still in  
11 the United States. So it's not like we're losing them  
12 to go home. If they have opportunities, and a lot of  
13 it is immigration issues, they would be here in the  
14 United States contributing. Another interesting aspect  
15 about the PhD degree in engineering (inaudible)  
16 70 percent of the engineering PhDs, go to work in the  
17 industry (inaudible). So that's the way we come in  
18 (inaudible) for energy industry.

19 MS. WELSH: Interesting. So let's talk about  
20 industry. Industry is desperate for skilled workforce.  
21 All of the people that you are training, what kind of  
22 partnerships are you doing with industry, with other  
23 states in the region, and then of course I'm going to  
24 ask you, is there an opportunity for partnerships with  
25 the federal government to find and keep those -- that

1 skilled workforce? So industry, other states, federal,  
2 and you can address any or all or none, if you don't  
3 have an answer.

4 MR. ZAPPI: You want the last guy to speak  
5 first this time?

6 MS. WELSH: Sure.

7 MR. ZAPPI: With a name like Zappi it's rare  
8 I get to do that my whole life. (Inaudible) in  
9 particularly in engineering and research (inaudible) of  
10 universities, we have a very strong partnership in the  
11 industry. We do, much like a community college, in our  
12 case, we do a lot of (inaudible) education,  
13 internships. In fact, this year we had more internship  
14 opportunities than I had warm bodies to put in there.

15 So the industry is also doing a lot, in terms  
16 of stepping up in these poor economic times for hiring  
17 and making these tremendous donations to provide  
18 hands-on (inaudible) in the classroom. With other  
19 states, we do a lot of interaction with the other  
20 universities. We will share a lot of information.  
21 We -- we share our secrets on how to recruit students  
22 (inaudible) and some of our success. And the federal  
23 government, in my case, I think that the ultimate role,  
24 and I'm a former 18-year federal employee in a research  
25 lab, is collaborative research in the industry and the

1 universities to keep the engineering students  
2 (inaudible) and technology engaged. Studying up these  
3 (inaudible) programs that (inaudible) pretty  
4 significant fingerprint of students on that work  
5 because if you're going to not only generate a  
6 (inaudible) you're going to generate a really, good  
7 solid (inaudible) as a result of that (inaudible) work.

8 MS. WELSH: Excellent. Thank you.

9 MR. BILLINGS: I've talked a little bit  
10 earlier about the -- the -- the (inaudible) which is  
11 a -- which involves funding from the state and  
12 partnering with the industry and the partnership of  
13 academia. It's a program that's in it's very early  
14 stages, just a couple of years old. There's a hope  
15 that it will grow and we can replicate (inaudible) to  
16 make sure we have everyone at the table to address  
17 specific workforce needs, to design a curriculum that  
18 is based on producing people that are ready to go into  
19 the workforce, having instructors who have some -- some  
20 real work experience in the industry. Each of those  
21 posted it's own challenges in terms of being able to  
22 create a successful program that actually meets  
23 (inaudible).

24 We work also with -- with the federal  
25 government through a number of advisory committees. We

1 (inaudible) in large (inaudible) with the Coast Guard  
2 with (inaudible) and to talk about different issues  
3 that may be coming up with regard to safety (inaudible)  
4 and other operational issues, but I think certainly on  
5 the (inaudible) that it would be wonderful to see some  
6 sort of formulized (inaudible) to look at. How we can  
7 better equip veterans who are going to be leaving the  
8 service for the these types of jobs. Where there is a  
9 need and (inaudible) scenario that we had if we can get  
10 some sort of focus structure around that (inaudible)  
11 working with the federal government and both of the  
12 (inaudible). We certainly appreciate (inaudible). We  
13 can make sure we're giving a lot of great opportunities  
14 for our veterans as they are coming out of the service.

15 MS. WELSH: Excellent idea.

16 MR. BARNES: I think from my perspective, I  
17 don't necessarily have as much (inaudible) existing  
18 partnerships or opportunities to expand as -- in -- in  
19 very specific ways, but I would just point out that,  
20 you know, as we've been studying the industry, the  
21 workforce challenges. The thing that's really emerged  
22 is the (inaudible) of this challenge and that's  
23 something that crosses (inaudible) traditional industry  
24 boundaries and because of that, I think it's just  
25 inherently becoming harder for -- for -- you know, I

1 think (inaudible) the balance of -- of contributions to  
2 these partnerships, I think it's a little bit harder to  
3 depend as much on the industry side.

4 I know the industry is -- is very concerned  
5 and willing to contribute to solving this problem, but  
6 no business can do it alone. They may find themselves  
7 training, you know, some fantastic workers, the next  
8 day they may get hired by a competitor or hired to do  
9 (inaudible) working in a different area.

10 So -- so I think -- I know there are examples  
11 of that and I know that that's going to be part of the  
12 solution, but there has to be a significant role, not  
13 only in the state level (inaudible), but something that  
14 probably is missing to some extent is the federal  
15 level, trying to insure that this -- this challenge is  
16 being addressed across states (inaudible).

17 MS. WELSH: Mr. Hammond?

18 MR. HAMMOND: Thank you once again. Once  
19 again, in the building construction trades, we have  
20 another mechanism that we can reach out to 10 to  
21 thousands of employees within weeks. Prime example, it  
22 was right after Hurricane Katrina, when we had major  
23 projects going on (inaudible) prior to that. And some  
24 of our customers who was (inaudible). After Katrina  
25 everyone from (inaudible) other places, were devastated

1 and scattered all over the country. We brought in  
2 thousands and thousands of -- of (inaudible) from our  
3 trade union within weeks. Within two to three weeks we  
4 had every job back up and running just as if it didn't  
5 miss a beat.

6 We have (inaudible) from some of our good  
7 customers that said it was amazing. We thought we'd  
8 finish this hotel in -- in five to six months, but you  
9 brought this highly skilled workforce down from -- from  
10 all over the country. We finished in three  
11 (inaudible). Thanked me for those services.

12 So just like this shortage that (inaudible)  
13 the industry, (inaudible), one card (inaudible). I can  
14 make one call (inaudible), and he can reach out to the  
15 14 other trade union (inaudible) because we have some  
16 high unemployment in places like Detroit, Chicago,  
17 Saint Louis, Atlanta. I mean thousands and thousands  
18 of workers that's out of work. (Inaudible) might not  
19 be right here, but we do have (inaudible) in our region  
20 (inaudible) and I did mention (inaudible). Because you  
21 know the way the process is and that's why I do want to  
22 work with the federal government there because the way  
23 the system is (inaudible) and advertise and reach out  
24 (inaudible) community for man power and you have reach  
25 to reach out (inaudible). Look, I don't have anything

1 against (inaudible). To be honest with you.

2 But on the other hand, I look out for our  
3 workers right here (inaudible) the United States of  
4 America. (Inaudible) I hope there's some process  
5 (inaudible) make that one call, let me get the tens and  
6 thousands of workers that are out there who could  
7 possibly get our hands on from some of these highly  
8 unemployed areas. (Inaudible) looking at the shortage  
9 (inaudible) we might need 60,000 new construction  
10 workers by the year -- (inaudible) June of 2016.

11 So with that being said, I would hope that we  
12 don't reach out to (inaudible). Let's at least reach  
13 out to some of our brothers and sisters around this  
14 country who are unemployed, can't, you know, make house  
15 note, in foreclosure, put food on the kid's table and  
16 all of that stuff. I work with community colleges. I  
17 work with offshore rigs and I'll work with our federal  
18 government. (Inaudible) and not only (inaudible) in  
19 our community first, but reach out (inaudible) et  
20 cetera. Thank you.

21 MS. WELSH: Thank you.

22 MR. MEADOR: (Inaudible.) They made a  
23 5.1 million-dollar donation that started the seed money  
24 to begin the (inaudible). Along with (inaudible), but  
25 it's not just a number of other businesses involved in

1 this, there are other companies. (Inaudible), but it's  
2 about businesses (inaudible).

3           The cooperative efforts of these colleges are  
4 so vitally important, is we're working with the  
5 business industry and as I mentioned (inaudible) center  
6 of excellence and what they've done for us. But across  
7 our colleges there other (inaudible) going on as well.  
8 Over in our Reserve campus, we -- we've got -- just  
9 finished last week, we're celebrating \$1.1 million in  
10 donations from the -- the river region (inaudible), the  
11 chemical plants and (inaudible) region (inaudible)  
12 raised \$400,000 in addition to that. In addition to  
13 Saint John the Baptist Parish (inaudible) to increase  
14 training for people in the (inaudible).

15           The southern part of our state for the  
16 offshore industry, there are a number of (inaudible)  
17 offshore (inaudible). When it comes to the maritime  
18 (inaudible) the veterans. It's a shame that we have a  
19 system here for veterans who quit working the Navy,  
20 they spend their time in the Navy, (inaudible) the time  
21 they spend at sea. So if there was a school that  
22 trained people who become mariners, we have (inaudible)  
23 proper credit for that. (Inaudible), so I support that  
24 and I really feel like our veterans should get better  
25 credit for their sea time. (Inaudible) some of our

1 work force needs.

2           Like I talked about earlier about across our  
3 nation, we do have (inaudible) because other parts of  
4 our nation, there are numerous workers, highly skilled  
5 workers (inaudible), and we got to reach out to them,  
6 we got to recruit them. We've got to be able to  
7 (inaudible) our community. And we know when they come  
8 to Louisiana they're going to stay because (inaudible)  
9 part of our workforce. Because it's not everywhere in  
10 Louisiana -- in the United States rather, that we find  
11 3.1 unemployment. Some parts of our country has a much  
12 higher unemployment rate, (inaudible). To take that  
13 chance to (inaudible) to load a U-Haul up and move  
14 south. Reaching out across the nation is an important  
15 factor.

16           MS. WELSH: Okay. But let's wind up this  
17 discussion with the question I asked everyone. And it  
18 is, this task force it -- all agencies (inaudible) this  
19 task force (inaudible) with workforce issues for the  
20 last decade. The Department of Energy has done a  
21 tremendous amount (inaudible). But this is going to be  
22 a big part of the report that comes out in January. So  
23 if you could tell the QER task force one thing to  
24 include in their report that has recommendations, is  
25 there something that you would like them to include in

1 that. Remembering that the audience for this report is  
2 all of us, of course, but it's also Congress and lots  
3 of other policy makers as well. So what are your  
4 recommendations to the QER task force, what part of  
5 workforce training, education, recruitment,  
6 partnerships, whatever, should the QER task force focus  
7 on in its first year? Remembering that the first year  
8 is generally about infrastructure, but we've all ready  
9 tackled workforce within that, I believe.

10 MR. ZAPPI: You want the last to be first  
11 again.

12 MS. WELSH: Yes.

13 MR. ZAPPI: I'll take a stab at it even  
14 though it's not (inaudible). I'm going to go back to  
15 what I said. I think we have to see DOE and other  
16 federal agencies support developmental efforts that are  
17 conclusive -- heavily conclusive (inaudible) college  
18 engineering and working on that level of talent.  
19 Including students both at undergrad and graduate  
20 levels is critical. And I think those efforts should  
21 be collaborative between the industry and universities.  
22 That's worked very well (inaudible) alternative energy  
23 programs for DOE by the way. Because what you find is  
24 that the university (inaudible) kind of people and the  
25 industry tends to be "so what's." And when you sit in

1 a room with that type of discussion, it's very  
2 enriching for both sides.

3           And in my experience the students learn a lot  
4 and a lot of good technology comes out of there. So  
5 that's would be -- that would be my bid on this.

6           MR. BILLINGS: I'm starting to repeat myself  
7 a little bit probably, but I would -- I would focus on  
8 the -- the (inaudible). Think about (inaudible)  
9 commercial mariners that is something that is done by  
10 the Coast Guard. And so we're really just looking for  
11 two feder -- federal entities to talk to one another,  
12 through military service branches that administer old  
13 training records for personal records (inaudible)  
14 individuals to the (inaudible) process so that they  
15 don't have to start (inaudible). Career advancement  
16 and life after service is something that is (inaudible)  
17 to help them think about that, think through that, well  
18 before they get out. And we've got a framework that's  
19 been under discussion for -- for several years at  
20 (inaudible). So this is not a new concept, it's been  
21 cooked pretty well. We just need to kind of push it  
22 through.

23           And (inaudible) looking for ways to try to  
24 get into the schools earlier and making sure that we  
25 have painted a very clear picture and help the students

1 to understand what sort of opportunities are out there.  
2 And when we talked about STEM education (inaudible)  
3 making sure that we're not just providing money to the  
4 (inaudible) that are very sort of loosely based.  
5 (Inaudible.) What's going on with that particular part  
6 of the country or specific jobs (inaudible) kids can  
7 see and get up close to and touch and experience them.  
8 And just try to bring that home as much as possible and  
9 to make it real so they can visualize it and get kids  
10 excited about it. So I think we're (inaudible)  
11 initiatives that we have that are already being funded  
12 and the federal government making sure that we're  
13 really doing that with an eye towards what employers  
14 are looking for and making sure the kids understand the  
15 tangible benefits of those types of communications.

16 MS. WELSH: Perfect.

17 MR. BARNES: I would -- I would emphasize  
18 that the responsible workforce challenges needs to be  
19 targeted and efficient. And I think that the growth  
20 we've already seen in -- in oil and gas and a growth  
21 that we're experiencing right now has been in  
22 (inaudible) has been -- you know, I think initially  
23 responding to as sort of normal growth and -- and it  
24 was within the systems (inaudible). And I think all of  
25 a sudden in the last year or two (inaudible)

1 recognition that this opportunity is a lot bigger than  
2 we saw coming. And the initial response was kind of a  
3 emergency type response. (Inaudible) everything we can  
4 to expand programs and increase capacity and that's  
5 been (inaudible) the necessary response.

6           We've seen some progress with programs,  
7 expanding significantly. Some of (inaudible), but we  
8 also need to be careful to make sure that we don't over  
9 invest in area -- in some areas and leave others  
10 lacking. So I think that's trying to tie back to --  
11 just a recognition of some of the work that's already  
12 been done to try to quantify the demands (inaudible)  
13 level. And (inaudible) work that we need and how much  
14 of that can we get out of what we already put in place  
15 and how much more investments (inaudible).

16           MR. HAMMOND: I'll just try to hit three  
17 bullet points. First of all, (inaudible) agree with  
18 Mark down there. I said earlier, trying to get to our  
19 school kids earlier (inaudible), trade shop. There's  
20 great opportunities out there. You can make 60, 80,  
21 hundred thousand dollars easily (inaudible). And just  
22 think about (inaudible) pay off all the student loans  
23 off at the end of the day. (Inaudible.) With that  
24 being a process and, you know, 6th, 7th, and 8th  
25 graders (inaudible). Something like that (inaudible).

1 Something else that (inaudible) in our high school we  
2 had (inaudible) education. (Inaudible.) Firefighter  
3 (inaudible). You want to be in the medical  
4 facilitator. I just think that program, knowing kids,  
5 want to go into an occupation outside of a big time  
6 profession. You can setup in high school 10th, 11th,  
7 12th grade (inaudible). Truly believe me they want to  
8 be a nurse or something and next year you might want to  
9 be (inaudible). It's finding out how much their uncles  
10 and nephews made out there in the industry. So I don't  
11 think a school that (inaudible) great (inaudible) up  
12 and down. Get that training before you get out of high  
13 school.

14           And the last thing that I touched on, the  
15 outreach program, I think it's very important to send  
16 it back (inaudible). We certainly understand the  
17 language that (inaudible) some kind of mechanism or  
18 process (inaudible) to make sure reach out to other  
19 states. That's my (inaudible) issue, to make sure that  
20 everybody here (inaudible) and highly trained  
21 (inaudible) and (inaudible). Thank you very much.

22           MS. WELSH: Final words.

23           MR. MEADOR: It would be (inaudible) didn't  
24 mention the work that Mayor Landrieu's office is really  
25 in this area (inaudible) on the state level. Senator

1 Landrieu's office (inaudible) over the last year  
2 looking at (inaudible) and exploring this to resolve  
3 that through her support, there's been some ideas that  
4 were started and supported along the way. One of the  
5 ones I guess I didn't speak of earlier was the  
6 (inaudible) agreement between the (inaudible) folks  
7 (inaudible) the effort between the (inaudible) South  
8 Central Louisiana Technical College and the Nicholls  
9 State University campus. All (inaudible) students move  
10 between colleges and we share information, we share  
11 resources, and that's really what it's about. It's  
12 about people sharing their resources. (Inaudible)  
13 level, so we take students (inaudible) associate's  
14 program (inaudible). That cooperation and opening up  
15 the doors (inaudible), we're not competitors, it's very  
16 important that we start (inaudible) our workforce.  
17 That's what's happening across Louisiana.

18           One last point on the federal level  
19 (inaudible) to look at and Senator Landrieu (inaudible)  
20 on this subject is (inaudible). 600 hours of minimum  
21 training. So if we want to bring someone in that  
22 qualifies (inaudible) they got to stay in school about  
23 five-and-half-months to qualify. And the current  
24 legislation I believe is now 12 (inaudible). That's an  
25 important factor. So now short-term training takes

1 (inaudible) who needs skills to go to work and they can  
2 go to work quickly. (Inaudible) five or six more  
3 months (inaudible) so that's important piece of federal  
4 (inaudible).

5 MS. WELSH: Well, you've got me charged up on  
6 education for sure and I know the audience will agree  
7 with me. Please join me in thanking these very  
8 special --

9 (Applause.)

10 MS. WELSH: We're now going to into the open  
11 mic session of the meeting. I'd like to ask DOE staff  
12 to join me up here. So thank you everyone for sitting  
13 through what has been an enormously and interesting and  
14 educational morning, but now, we want to hear from  
15 everyone in the room who has signed up to speak. We've  
16 got a process for doing that and so let me just outline  
17 what the process is.

18 Every speaker has three minutes to give an  
19 oral summary of their statements and we want to  
20 encourage that you submit those statements, I'm going  
21 to repeat myself again, to [QERcomments@HQ.QER.gov](mailto:QERcomments@HQ.QER.gov), but  
22 what we have is an opportunity for you to speak before  
23 the people who are actually doing the work of the QER  
24 and it is my honor and privilege to introduce to you my  
25 colleagues from the Department of Energy.

1           We first have Dr. Karen Wayland who is the  
2 deputy director for state, local, and (inaudible)  
3 corporation. She is leading this outreach effort and  
4 works about a 17 hour day, seven days a week. Next to  
5 her we have Matt McGovern, who is special adviser in  
6 the office of energy and policy and systems analysis  
7 and works on Karen's team. Then we have Larry Mansueti  
8 who is the seeker adviser in the office of electricity  
9 liberty and energy reliability. He is helping to  
10 support the QER from that position. And last, but  
11 certainly not least is John Richards who is a senior  
12 adviser in the office of energy policy and -- and  
13 systems analysis and on Karen's team. Once again, I'm  
14 Peggy Welsh with Energetics and I'll be facilitating  
15 this open mic session, but before I do that I want to  
16 turn to Dr. Wayland to see if she has any opening  
17 remarks.

18           DR. WAYLAND: Thank you. And just to remind  
19 you that all of the work that we're doing with  
20 (inaudible) with the White House (inaudible)  
21 presidential memorandum and directing us to outreach.  
22 We'll be going around the country as Secretary Moniz  
23 noted, this is the third meeting. Will be somewhere  
24 around 14 or more including follow-up meeting in the  
25 roundup session in the following (inaudible) we tend to

1 finish these meetings by the end of the summer into  
2 early fall is the intent to form the analysis.

3           You will be able to find for all these  
4 meetings the transcript of the meeting, meeting  
5 summaries, all of the statements from the panelists, as  
6 well as their presentations, and a general meeting  
7 summary will all go up on our webpage of these  
8 meetings. You'll also be able to find (inaudible) the  
9 questions that we're trying to graupel with each  
10 meetings and ultimately, at the end all of the comments  
11 that we receive on (inaudible) manager report review on  
12 the website. Once the final report is done (inaudible)  
13 in January (inaudible) of get everybody mad again. And  
14 I do want to thank again LSU for hosting this as well  
15 as providing some staff to help us move things more  
16 smoothly and my staff here as well for all of the work  
17 they've been doing and traveling and really to all the  
18 panelists because (inaudible) we have had stickler  
19 about time to deliver their statements and then staying  
20 here and letting us know your input. It is really  
21 critical and we appreciate it. Thank you.

22           MS. WELSH: Thank you very much. Our first  
23 speaker, and please forgive me if I don't get your name  
24 correct, but it looks like Onrye Boullette. Did I  
25 pronounce your name correctly?

1 MR. BOULLETTE: Boullette.

2 MS. WELSH: And just a reminder, three  
3 minutes summary. Okay. And I'll give you the -- the  
4 hand when you're time is up.

5 MR. BOULLETTE: Okay. Very good. Good  
6 afternoon. My name is Onrye Boullette and I serve as a  
7 director of the Louisiana Highway 1 coalition. I  
8 believe it's fair to say that Highway 1 has developed  
9 into the nation's poster child for at risk critical  
10 energy infrastructure. The sole access road to Port  
11 Fourchon services that are necessary to (inaudible) the  
12 95 percent of the water facilities in the Gulf of  
13 Mexico (inaudible) this shall outrage (inaudible) that  
14 sit only two to three above sea level and it's  
15 subsiding at seven millimeters a year and when you add  
16 up a conservative two millimeters of sea level rise,  
17 this road faces the highest level of sea level rise  
18 rating within the entire U.S. coast. Our community  
19 recognized the dire changes that (inaudible) was going  
20 through back in 1997 formed the LA1 Coalition and  
21 started right away at providing funding to the depth  
22 and EIS to improve this highway. Federal agencies and  
23 congress have documented LA-1's roles that were energy  
24 infrastructure. Congress declared it. It's a sole  
25 high priority corridor in 2001 for its role as a

1 critical energy infrastructure. That same year  
2 (inaudible) MNSS authored a study on the effects of  
3 MNSS activity on the LA-1, determining that LA-1 would  
4 be increasingly strained.

5 Ten years later homeland security through  
6 that (inaudible) lease term determined that the  
7 consequences analysis on LA-1 that the highway could  
8 indeed be washed out by the perfect storm causing our  
9 nation to suffer up to 7.8 billion in the loss in GDP  
10 over a 90 day closure. (Inaudible) now estimates with  
11 their continued relative skill rise rate of nine  
12 milometers a year that LA-1 will be inundated to the  
13 point of closure just with high tides, and no storms,  
14 six percent of the time by 2030 and 55 percent of the  
15 time by 2050.

16 So our community went to work right away,  
17 engaged our state to build a replacement that would be  
18 resilient to future storm surge impacts and build above  
19 the hundred year storm surge height that FEMA has put  
20 out. With community backing and at public hearings, we  
21 went ahead and bonded out that balance (inaudible) sole  
22 revenues and started building the project and built  
23 four miles. We -- we've built another six miles since  
24 the end and what we need in the future to finish  
25 funding us is for our federal (inaudible) agencies to

1 support our funding request to DOT and you know the DOE  
2 I think should do this from the energy reliability  
3 standpoint, DHS from the energy security standpoint,  
4 and the interior department in their fiscal interest of  
5 seeing that revenue for the OCS. So we thank y'all for  
6 being here today. We'll try and engage all of the  
7 secretaries of the federal (inaudible) state agencies  
8 that are involved with LA-1 and we'll get it done with  
9 your help. Thanks so much.

10 MS. WELSH: Thank you. Our next speaker is  
11 Jeff Pitresh.

12 MR. PITRESH: Thank you, Peggy. I'm Jeff  
13 Pitresh from the National (inaudible) Gas Association.

14 MS. WELSH: Speak closer to the microphone,  
15 please.

16 MR. PITRESH: I'm pleased to be able to be  
17 here today. Our interest in today's panel is in terms  
18 of the petroleum transmission infrastructure. Our  
19 membership includes 2500 (inaudible) that heat with  
20 propane. In talking here today it has been largely  
21 focused on the Gulfcoast and that's entirely  
22 appropriate, but from our perspective the petroleum  
23 transmission infrastructure that starts in the  
24 Gulfcoast. It is the propane backbone of the midwest,  
25 midland, southeast, and New England as our (inaudible)

1 the department of energy know we had a challenging  
2 winter we thank them for their cooperation in the  
3 partnership, but one of the things we learned as an  
4 infrastructure is both part of the problem and part of  
5 the solution. Thanks to the replumbing of (inaudible)  
6 flows report infrastructure flow (inaudible) changes.  
7 One of the downsides we've seen is that petroleum  
8 transmission pipelines can abandon service without any  
9 federal authorization. There actually is a (inaudible)  
10 combat scenario in Louisiana that raises these issues  
11 (inaudible) in the way of issue to, but the regulatory  
12 structures are entirely new. We also found (inaudible)  
13 is a black box thanks to a hundred year old law  
14 (inaudible) what's going on in the pipeline, we're  
15 going to ask congress to change (inaudible) the black  
16 box issue.

17 Our colleagues (inaudible) are here today to  
18 regulate that is also an issue. One of the speakers  
19 here spoke about higher railways. From our perspective  
20 one of the challenging problems is moving propane to  
21 the (inaudible) as it does by train and we think there  
22 needs to be (inaudible) our approach to petroleum  
23 pipeline regulation to put it more on foot with the  
24 (inaudible) transmission and with natural gas  
25 pipelines.

1           The key this winter has been the need for  
2 separation of pipelines in the marketing affiliates  
3 with a (inaudible), but this is very important and so  
4 your efforts (inaudible) are very timely for the  
5 challenges that we face. Thanks very much for your  
6 time and interest.

7           MS. WELSH: Thanks, Jeff. Our next speaker  
8 is -- excuse me, Sydney Coffee.

9           MS. COFFEE: Thank you. I'm Sydney Coffee,  
10 senior adviser to the America's Wetland Foundation. We  
11 were established some 11 years ago and had had -- at  
12 our (inaudible) are along the Gulfcoast. One of our  
13 strongest initiatives has been in our (inaudible)  
14 initiative. We have members of (inaudible) Chevron,  
15 Shell, Conoco, Phillips, Entergy, along with the  
16 Environmental (inaudible), National Wildlife  
17 Federation, (inaudible) National Audubon.

18           It has been a very interesting time to bring  
19 these groups together and we have reached a consensus  
20 on what (inaudible) and developed a lot of trust among  
21 pretty historically, I guess you could say, sometimes  
22 disagreeing interest. Today what I'd like to do is  
23 just briefly talk about (inaudible) to reports that we  
24 submitted online. And the first is the (inaudible)  
25 report. I think (inaudible) we give you a lot of great

1 information, (inaudible) released in 2010 (inaudible)  
2 and it's a consensus opinion of our -- our energy post  
3 initiative. It includes Texas, Louisiana, Mississippi,  
4 and Alabama, (inaudible) landscape communities  
5 (inaudible) disasters both manmade and the natural the  
6 effects of climate change on the region and the scale  
7 of change that's facing the region. The second which  
8 is (inaudible) this report, which I just brought  
9 (inaudible), it's beyond intended consequences.

10           We -- we held 11 forums across the Gulfcoast  
11 from South Padre Island to (inaudible) this was all  
12 about (inaudible) future. This was all about -- all  
13 based on some research, \$4 million worth of research  
14 that the Entergy Incorporation in partnership with the  
15 America's Wetland Foundation did and it goes ZIP code  
16 by ZIP code along the Gulfcoast showing the inundation  
17 scenarios from the climate change, from sea level  
18 rising that will happen and what it would cost this  
19 region to maintain it's infrastructure. And the result  
20 was that over 20 years if (inaudible) infrastructure  
21 that's located on the Gulfcoast specifically in  
22 Louisiana. We would simply -- the cost of it  
23 (inaudible).

24           And then the last one is our coastal  
25 sustainability (inaudible) also found interesting.

1 Thank you.

2 MS. WELSH: Okay. Our next speaker is Tony  
3 Glasco. Please speak closely into the mic.

4 MR. GLASCO: I'm Tony Glasco. I appreciate  
5 being here today. My company is (inaudible) and I'm  
6 previously trained as a coastal (inaudible) and  
7 basically what we're (inaudible) working in energy  
8 efficiency and energy alternatives. I'd like to  
9 mention that I think (inaudible) as part of your  
10 announcement was very valuable (inaudible) targeting  
11 issues you're dealing with here. That helps us  
12 (inaudible) discussion and personally I (inaudible).

13 Looking at the specifics there or item number  
14 four dealt with resilience and I think what we just  
15 heard from American -- America's Wetlands is exactly  
16 what I would reiterate (inaudible) for supporting the  
17 restoration efforts that would somehow slow the loss  
18 the buffer (inaudible) a lot of cases where you will  
19 find that -- that once they buried the transmission  
20 lines are now (inaudible) of erosions of storms  
21 (inaudible).

22 There was another point I'd like to mention  
23 and that is item 16, it discussed energy supply and  
24 security. I have been involved in (inaudible) for a  
25 few years and I think it should be recognized that

1 since the President's called for a substantial increase  
2 (inaudible) US that there ought to be someway  
3 (inaudible) which would provide a greater  
4 sustainability of energy supply in an emergency and in  
5 case of a power loss at critical sites.

6 It certainly applies very well to the  
7 hospitals and other (inaudible) institutions and we  
8 find here in Louisiana that the biggest installations  
9 are in the industrial complex along the river and they  
10 no where (inaudible). (Inaudible) That in our state.  
11 So thank you for the opportunity.

12 MS. WELSH: Thank you very much. That  
13 concludes the speakers that have signed up in advance,  
14 which concludes our meeting today. I'd like to turn  
15 the floor back to Dr. Wayland for final comments.

16 MS. WAYLAND: Thank you very much.

17 MS. WELSH: Thank you all for coming and for  
18 staying and for those of you online, thank you for  
19 watching. Please check the website, [www.energy.gov/QER](http://www.energy.gov/QER)  
20 for the presentations that you've heard today, they'll  
21 be up very soon. Thank you all and have a great rest  
22 of your day.

23 (Meeting concluded at 1:41 p.m.)

24

25

1 CERTIFICATE

2

3 This certification is valid only for a transcript  
4 accompanied by my original signature and original  
5 required seal on this certificate.

6 I, Sammantha Morgan, Certified Court Reporter in  
7 and for the State of Louisiana, as the officer before  
8 whom the Board of Regents' meeting was held on the 27th  
9 day of May 2014, at New Orleans, Louisiana; that this  
10 meeting was reported by me in the steno reporting  
11 method, was prepared and transcribed by me or under my  
12 personal direction and supervision, and is true and  
13 correct to the best of my ability and understanding;  
14 that the transcript has been prepared in compliance  
15 with the transcript format guidelines required by  
16 statute and rules of the board; that I am not related  
17 to counsel or to any of the parties hereto, I am in no  
18 manner associated with Our Lady of Holy Cross College  
19 and I am in no way concerned with the outcome thereof.

20 This 12th day of June 2014, New Orleans,  
21 Louisiana.

22

23

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25

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SAMMANTHA MORGAN  
RPR, CCR #2011016  
Certified Court Reporter  
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