

API

BLOGGER CONFERENCE CALL on ENERGY CURRENT EVENTS

MODERATOR:

Jane Van Ryan, API

SPEAKERS:

Red Cavaney, President and CEO, API
Prentiss Searles, Marketing Issues Manager, API
Sara Banaszak, Senior Economist, API
Tim Sampson, Senior Advisor, API
Richard Ranger, Manager, Upstream, API

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Bloggers on the call included Bob McCarty from Bob McCarty Writes, Carter Wood from ShopFloor.org, Cindy Kilkenny from Fairly Conservative, Devil's Advocate from Copious Dissent, Doug Lambert from Granite Grok, Gail Tverberg from The Oil Drum, Geoff Styles from Energy Outlook, Greg Balch from Goat's Barnyard, Jim Hoeft from Bearing Drift, Joules Burn from The Oil Drum, Joy McCann from Little Miss Attila, Peter Carlock from OPNTalk, Michael Swartz from Monoblogue, Mick Orton from FedUp Network, Pejman Yousefzadeh from RedState and A Chequer-Board of Nights and Days.

00:00:13 RED CAVANEY: Good afternoon, morning, or wherever you may be. We're delighted that you were able to join us today. We thought this was a particularly appropriate time to have a call. A couple of things are coming together. First of all, while they're not yet out of town, there is hope that once we get the emergency bailout package together and passed – they've got a number of things lined up like the Senators' bill, the continued resolution, possibly a second stimulus package and some other cats and dogs. But everybody has great enthusiasm for getting out of town this weekend. So I'm hopeful that will be the case.

And the continuing resolution – at least the one that passed the House – doesn't expire until March 6, so it's not likely that there would be an extended period of time that they'd come back during a lame-duck. So that's kind of what we're hopeful. So that's sort of at least got a pretty good idea of where we are congressionally.

And then also, we've moved a bit further along and have a little better read – although certainly not by any manner complete – about the hurricane experience down in the Gulf area. So we thought we'd go ahead and open and if there's any conversation or questions related to these two; but then also, as Jane had said, anything is fair game. We've got a bunch of people here who are experts in respective areas and if we've got questions that we can't fully answer, we'll be sure and follow up with information you need to do your job on your end.

So thank you again for joining us. And Jane, we're ready to go when you are.

00:1:49 JANE VAN RYAN: Sounds good. One other thing I'll mention to you: In addition to telling us who you are when you ask the question, which is helpful to us, if you also have questions that you want to send to me by e-mail, feel free to do that. I have my Blackberry with me.

Okay, who'd like to go first?

00:02:05 DOUG LAMBERT: Jane? Hello?

00:02:08 MS. VAN RYAN: Yes, go ahead.

00:02:11 MR. LAMBERT: Yes, this is Doug from Granitegrok.com. Reading in the news that Congress is allowing the moratorium on offshore drilling to expire, is this the good news that we've all been waiting for, or is there more behind this news that really should damper any enthusiasm over it?

00:02:35 MR. CAVANEY: Well, it is of a sort good news. But I think we should temper any enthusiasm with a sort of realistic look about what lies ahead. Already, there have been a number in Congress who are out telling their supporters that the moratorium will be reinserted when the new Congress and the new president gets in place and that this is just a, quote, unquote, "temporary circumstance." Now, from our standpoint, we have to treat it the same way as well.

As you all know, in our industry, with such long time horizons and such heavy upfront capital expenditures before anything does happen, shall we say, you know, a temporary period like this really isn't sufficient, either for the federal government or anybody else to lay the groundwork to get us to a point where people could actually bid on a lease or do something concrete. So we're hopeful that people will begin progress.

We're going to spend time, much as we had earlier, on trying to help educate people and help them better understand what's at stake when they talk about a moratorium. The one thing that is pretty clear is that while the OCS moratoria is a word familiar with everyone, there are a lot of different interpretations as to what that means. And let me just make a brief statement and we can do follow-ups, answers to any questions you might have.

The moratoria, if you look at the public and sort of in our view, is really all about once it's lifted, actually getting oil and gas from offshore and getting it to the marketplace. But one of the things that there is some concern about on our part is if you look at the undiscovered, technically recoverable reserves estimates of several decades ago by the government, most of those reserves are in fairly close, inside the 50-mile limit, and not out beyond 100 miles or where some of the moratoria talk is now. So that's part of the education, part of the effort that we think is important for people to understand. And there's a whole lot of other backup things we could go into later, if it's of interest.

So we're pleased that there was an acknowledgment by both parties that the public has really sort of reversed track, if you will, over the course of this past year and has heavy support for drilling. But the mechanics of making sure you have it is sufficiently to actually get the private sector and the public sector to do what they need to do to be able to get the first bids out and then actually begin the exploration phase is still a bit away and still a few more steps by government.

00: 05:22 MS. VAN RYAN: Quick question: May I ask who joined us just a moment ago?

00:05:27 MICHAEL SWARTZ: Oh, it was me, it's Michael Swartz.

00:05:23 MS. VAN RYAN: Oh great, Michael. Thank you for joining us. Okay, do we have a question now for Red?

00:05:37 DEVIL'S ADVOCATE: Yes, this is Devil's Advocate from Copious Dissent. I just have a quick question on how much the potential of a reinstatement of the moratorium is actually stalling future production. If you know that they might throw it in at the last minute after you spend millions of dollars on whatever you need to do to get production going, how is that impacting you, just the fear of that getting put in place again?

00:05:56 MR. CAVANEY: Yeah, well, right now, we're continuing on a path that we would have been on had the moratoria languished, stayed in the continuing resolution or not. What we're actually looking for and what we need is some proactive signal from Congress in particular or whoever the next president is that the moratoria is passed and here is what we can agree to in terms of potential exploration and production opportunities. That's really what we need to go to the next round. Otherwise, we would just continue along as we have been looking at the five-year plan and taking those quarterly leases as they came up.

But as I said, we consider this because it did take a proactive decision not to include the moratoria as the first good sign that there is some folks paying attention to what the public is asking for.

00:06:41 JIM HOEFT: Hi, thank you. Red, can I ask a question?

00:06:46 MR. CAVANEY: Sure.

00:06:52 MR. HOEFT: Can I ask a quick question? Thank you. This is Jim Hoeft of Bearing Drift in Virginia. On the fact sheet – and I appreciate that being put together – it talked about the two-tiered market and how the – even though crude oil price was going down – I think it went down to – bottomed out at like \$92 a barrel, even during the hurricane – the price of gasoline at the pump kept going up. So my question is coming full circle here, talking about the moratorium: If we had extra refining capacity in the United States, for example, off the coast of Virginia, what would that impact translate to at the pump for consumers?

00:07:39 MR. CAVANEY: Well, we can't be – exactly that price principally – for anti-trust reasons we're just not privy to the actual decisions made by the people at retail, which is really where that price gets translated. There are a couple of things I would say. And there's conversations we've had with people in Virginia and some of the other states that would like to consider having some offshore exploration.

The first of those is that if you're a state who under the scenario does an opt-in, to be able to do that you actually can start your leasing and the like. The opportunities are there, first of all. We think it's very important that there be some sharing of the revenues and royalties with the state because there will be infrastructure costs and things like this

that they're going to have to bear in order to support whatever effort the industry is going to have.

Secondly, a couple of states have talked to us in conversations about the fact that they see the whole idea of energy being a really important strategic asset as they go forward. And if you're a state that has a robust offshore activity, has the infrastructure on the ground, possibly sufficient to either put in some kind of gas processing plant there or possibly even a refinery of some kind, you can serve as a magnet for economic development – in other words, in trying to entice businesses as they expand and other kinds of things. So there's a whole bunch of factors that flow from the decision to be able to accept and accommodate natural gas and oil production offshore. So we can't say exactly how much it's going to be.

One thing I would say that – obviously this is really going far afield – but some of the dislocations we see at retail down in the Southeast are a result of the long trek that refinery production in the Gulf area has to make of the Colonial and Plantation pipelines and eventually end up in New Jersey. And when you have shutdowns to the extent that we've had with these two hurricanes, obviously, we're very tight on supply.

Were there to be other refineries or other subsequent developments somewhere along that path, that's going to provide a lot of flexibility and give a little more assurance. So you know, we're hopeful. But these will be company and individual investor decisions that will be made. But you have to start with the idea that you're going to have a dedicated source of American products as opposed to having to look at ever-increasing reliance on imports before you're going to get that kind of investment in those kind of locations.

(Cross talk.)

00:10:30 GREG BALCH: A follow-up on the refinery capacity question. This is Greg from the Barnyard. With so much of our refinery capacity concentrated in the natural disaster-prone areas like the Gulf and California, are attempts being made to expand production to areas that are less prone to this?

00:10:51 MR. CAVANEY: Well, there's two parts to that question. The first part is sort of a variation on what you've just asked, which is why did you put it all in the Gulf area and why did you put it in California? Well, if you'll think back at the time that those investments were made, those areas had both access to ready supplies of the crude oil and they were welcomed in the community and seen, as we talked about just a little minute ago, as a boon or a help at least to economic growth.

But once those went in, the last new refinery built back in 1976, if you go to the rest of the country, in most places, it is – I would say – close to impossible to site, to permit a refinery. And why do I say that? Well, there's been one in Yuma, Arizona – an operation that they've been trying to get the funding for a refinery and get all the permits down there, going back to the early 1990s. And they're still not there. And unless

Mexico starts to do more, they may actually get the permits and then find out that the supply isn't quite as dedicated as they thought to crude oil and that confounds the problem.

The other one is the Hyperion Group, which is up in South Dakota. And they are active in looking around. But they too have received sort of discouraging news. And if you look at the effort the industry did to try and locate at strategic places along the East and West Coast in addition to the Gulf, new LNG receiving terminals in order to make sure we can import natural gas in sufficient amounts, most of those have been turned down because of the "not in my backyard" syndrome.

So two points – one, we find it much easier to add production where people welcome you, appreciate you, and understand it's jobs and tax revenues that flow to the community. And number two, at the end of the day, you know, we want to make sure that we're going to have sufficient crude oil available – (inaudible, audio difficulties) – to see the development up in Alberta to bring down some of the crude oil that now flows from the oil sands. That's been one big – (inaudible) – that if we can see some more access provided, both onshore and offshore, that's going to provide, I think, a little more impetus for somebody to go out and consider embarking on a new refinery rather than adding incremental capacity.

I might say, while we're talking about capacity – between now and the end of 2010, we have about 800,000 barrels of capacity that are committed to and that are in the process, coming online. So that's a significant amount, certainly, with the decrease in demand that we've had over the course of the last year. Plus, that ought to give us a decent amount that we can add to the amount we already have.

And let us not forget, we think it also makes sense to have some level of imports because imports give you flexibility and allowance. For example, in times like this, those relationships pay very big dividends when we need to import finished product from outside our land, and sort of reverse the pipeline flows and get that into the refineries so they can put it into the distribution system.

So we're hopeful. We've been keeping more than abreast with incremental additions. But the big gains, you know, won't come until I think there is at least a good signal that you're welcome in certain areas and that supply is going to be available. And the little model that I mentioned about up in Virginia would be one case that you might see developed.

00:14:44 JOY MCCANN: Okay, this is Joy McCann. I have a quick follow-up on that as well. And that is that given the huge amount of production that we're capable here of Southern California, both in reality and theoretically, if we can open up the coast a little bit more. I don't know what the effort has been. But I do know that there are inland areas of California that are already considered somewhat industrial, are not – you know – pretty. And I'm just wondering what efforts have been made? You probably can't speak to this directly. But it just seems to me terribly illogical that we don't have

any refineries close to, say, Long Beach Harbor or Santa Barbara on the other side of the mountains there.

00:15:37 MR. CAVANEY: Joy, I'm from California, so I understand well your point and your description of the geography and topography out in the eastern part of the state. There are a lot of circumstances like that where you could look at it and say, where the growth has gone and why there aren't refineries there. One of the things you have to be a little careful about is – (inaudible, audio difficulties) – the infrastructure to put a refinery in a location where you might not normally expect to find one.

A couple of years ago, the government started an effort to try and make available Air Force bases and other kinds of bases, some kind of surplus land to use [for] a refinery. But what people encountered – by the time you look at all the infrastructure you would need to get the raw material there and then to process it and get it all out, the cost got so high per barrel of output that you just couldn't get the return on it and so there wasn't much happening there. And you went back to the model that they currently use where you can add a barrel of capacity to an existing refinery at about 60 percent of the cost of a brand-new barrel from a new refinery and you can bring it on at least twice, if not three times as fast. And that's sort of the conundrum we get caught in at these more remote locations.

00:17:04 MS. MCCANN: Well, I know that and I've heard that argument. I'm just saying that from a security point of view and from a safety point of view – (inaudible, audio difficulties) – I understand that it is more cost-effective to increase the output of an existing refinery. I'm just saying that if we're going to solve this problem and if we're going to do it in a security-minded way, it really seems to me that having the refineries more dispersed is a good way to hedge our bets, both in terms of security issues and, I think, even economically. I think it might cut down risk for the industry to have them more spread out.

00:17:46 MR. CAVANEY: Well, I think a couple of points. I don't disagree. But when you talk about spread out, it's where? It's much easier to put a refinery – from a cost-effective standpoint – if you're near a place where you have ready access to crude oil. And that's why the story about expanding offshore production will make some areas that wouldn't otherwise be looked at maybe all of a sudden look fairly attractive. But out in western part of California or something like that, we just know that's a bit of a challenge.

And still, at the end of the day, if you go back and look over decades of time, you'll see that refineries' returns have been not too much more than what you call a passbook savings account. And so, each time you build a refinery that has to give up, shall we say, a couple hundred million dollars of cost to do something that its competitors don't, it's going to be hard to recover it. And it still is the private sector that puts the money behind it. So I understand your point. We understand it. We think that this is one of the best chances, by opening up some of the OCS areas, where we might actually get some distribution that you haven't otherwise gotten because of the potential of creating

the energy hubs where nothing exists at a time when people are thinking more strategically about the value of energy.

(Cross talk.)

00:19:14 PETER CARLOCK: I have a follow-up on the refineries and the moratoria itself. This is Peter from OPNTalk. And the issue that I see – I think it's a positive thing, the moratoria being lifted, obviously. That's what 85 percent of Americans feel. We need to use our own resources. But in reality, is this – it's a victory. But are we not going to be faced with lawsuit after lawsuit after lawsuit? We're dealing with certain individuals in this country that, you know, do not necessarily look at things logically or even sanely. And you know, we'll have groups of people, one right after another, filing lawsuits that could tie this up, in essence, the rest of our lifetime, fighting it out in court. Is there any way, are you guys looking into a possibility of lumping everybody together in a class-action lawsuit, one court, one time, get it done with? Then, let's move on with production?

00:20:21 MR. CAVANEY: (Chuckles.) Maybe in our dreams. But I don't know of anybody that's actually tried to do that. Your point is well made. Let me just, for those people that may not know – back in February of this year, in the Chukchi up in Alaska, they had a lease sale, as a matter of fact, a very attractive lease sale. It ended up bringing in about \$2.7 billion of bonus bids for the government. And do you know, as we sit here today, every single one of those leases has a lawsuit filed against it?

(Cross talk.)

00:20:52 MR. CAVANEY: So there is now a very direct effort, obviously, like a whack-a-mole. Every time you do something, you're going to get a response. So we're just going to have to work our way through that. And hopefully, by beginning to explain it to people and having people pay closer attention, you know, we're going to get the right kind of support in the public.

The one thing that gave us encouragement was the fact that you could almost look at it – when gasoline got up to \$4.00 a gallon, all of a sudden, in people's minds all over the country, a connect the dots occurred. And people asked all the right kind of questions, came to the right conclusion. And politicians started to move.

So I think people will begin to understand that there is a connection between security. There is a connection between diversity to how we do this and a lot – [24:14] – are intended as much as anything to – (inaudible) – and to discourage the investment that is needed – (inaudible).

00:21:49 GAIL TVERBERG: Yeah, this is Gail Tverberg from the Oil Drum.

00:21:52 MR. CAVANEY: Hi Gail. How are you?

00:21:55 MS. TVERBERG: Oh, fine. I was wondering, aren't gasoline inventories kind of key to preventing shortages like what we are seeing now? Are there any steps being taken to make sure that we are keeping the gasoline inventories up? And I guess another issue is the credit crunch having any impact on the inventories?

00:22:13 MR. CAVANEY: I'm going to take your first question first. By all means, inventories are obviously key to being able to have the flexibility needed to ensure that all the outlets that need to have gasoline have got it. We are in the stage right now, but this much capacity down that we are actually, in many cases, importing additional product beyond what we normally would and reversing the pipeline flow that actually pumping finished product into refinery sites to then get out into the distribution chain. That is the same lesson we learned from Katrina and Rita experience that served us well there. And we are doing it again.

Our big problem, Gail, is that when you get two back-to-back hurricanes that are this close together chronologically, and given extended startup time it takes to bring refineries back on stream, and the fact that hurricanes are notoriously known for at the last minute adjusting their paths. So in a margin for error, more refineries get shut down than ultimately are in the path because you just don't know where it is going to go. And when they are down for those back-to-back periods of time, we are going on now – when you stop and think about it, landfall from Gustav was on September the 1st. So they started shutting down before that and here we are almost a full four weeks past that, where you haven't had a lot of refinery output from some areas.

So it is a challenge – much, much more difficult than if you just have one come through and you can start to move off and work can handle as you would. So we are doing everything. We have had circumstances in areas along, as I mentioned earlier, Colonial Pipeline and the like because as you get to the ends of some of those spurs, it is more difficult to get it. But we have also had people on the ground there. And what you find is it is not as though they don't have any gasoline or fuel. What you need to do is go out of the areas where there is concentration. And in many cases, you can drive 20 miles out into the suburbs and things like that and you will find gasoline.

So it's getting into those markets; it is just not in the volumes that people need. And obviously, when people are concerned about getting enough, everybody tops off and you all know what that means. That means even if we had sufficient gasoline, you know, people would still have to stand in line.

So we are all making progress. We are encouraged. We know it is an inconvenience. And we just don't know how better to handle the system because you can't preposition finished product like you can crude oil or gas for any extended periods of time.

00:24:58 MS. TVERBERG: Well, but we could have maintained inventories more like they were two, or three, or four years ago – came into this awfully low.

00:25:07 MR. CAVANEY: We were low, but you have got to remember we were low because demand was falling pretty much at unprecedented levels here in recent amounts of time. And so –

00:25:16 MS. TVERBERG: They can still keep inventory.

00:25:19 MR. CAVANEY: Well, yeah, you can. But it costs to keep inventory. And at the time you would have had to start building inventory, you couldn't have predicted that you were going to have hurricanes to the extent that you did. The last two years, we didn't have any hurricanes to speak of that really significantly bothered production.

So yes – so you could say somebody could, but people make those decisions. It is a commodity business. And every decision has an impact in terms of balancing off the customer service and the cost and the return to shareholders.

00:25:51 GEOFF STYLES: Can I just follow up on the other side of this inventory issue? This is Geoff Styles. I wonder if this has implications for some of these refinery projects that are a little further down the road. You know, when we look at the current inventories, either in absolute terms or in terms of day's supply, which takes into account the low demand, they are at extraordinarily low levels for gasoline.

And yet, in spite of that, even before the hurricanes, we have seen the gasoline portion of refining margins simply collapse. And they are really, I think, at unsustainably low levels. So, you know, whether this is a result of all of these economic factors rolled together or whether we are actually starting to see now with 6 percent of the market being satisfied by ethanol, ethanol is starting to crowd gasoline out of the market. What does all of this bode for some of these larger refinery expansions that were relying on a larger gasoline margin being there when they would start up?

00:26:56 MR. CAVANEY: Well, that is when individual companies factor into their decisions to make the investment. You know, we look at the – probably the same data you do – publicly available studies on various forecasts for demand. You know, obviously we look at the increasing component that will be going to biofuels as a part of that. And also, the other thing that is being factored in is as you go to these heavier grades of crude that are going to have to be used increasingly, your yield goes down and so there are other factors that play into there.

So a company could give you probably – they didn't share the information – a much crisper answer to this than we could having to look at the whole industry.

00:27:41 MR. STYLES: Thanks.

00:27:42 MR. SWARTZ: This is Michael Swartz. I write for Monoblogue. Now, earlier, you talked about an education effort to inform the public about your goals. But originally, it was based on a supply. Obviously, when we are paying \$4 a gallon for

gas, the supply end of it is paramount on people's minds. But now that gas prices are declining a little bit – it is down to 3.50, 3.40, 3.30 – and on the other hand, the unemployment rate is edging up to 6 and 6.5 percent.

Do you – (inaudible) – see a change in strategy that is really required in terms of education and taking it more away from the supply – making a less emphasis on supply and more of an emphasis on the jobs that are created?

00:28:33 MR. CAVANEY: We are going to be doing both because they both are relevant. We have not seen – and obviously, people are on the watch for it – a drop-off in the support for drilling that materialized now that the prices have been falling. But one of the things that is very important to us going back to the discussion we had about the OCS and the moratoria is there are some tremendous job opportunities with well-paying jobs available if people will end up moving forward.

These go beyond just the people who are going to man the various rigs and platforms and the like to the fact that particularly if you look at closer in – let's say 50 miles from shore. Fifty miles from shore where better than half of the crude and natural gas is undiscovered, but technically recoverable has been identified. Those are lands where the technology is such that we can build the platforms. We can build the rigs. We can do all the offshore work in U.S. yards and in U.S. manufacturing operations.

So there is a great deal of indirect labor that would flow and be connected to those things – much more so than would be in a case that you are out 100, 150 miles and you are going to rely on most of your platform work and drill ships and the like to be coming from abroad. So it goes to the point I made at the very beginning – if you expand the opportunities for becoming a sort of strategic energy center outside the traditional Gulf area or Southern California or a little bit less – let's say, outside Philadelphia, there is a pretty good opportunity here for good paying jobs – not just the construction jobs that moderate when you are done, but of a permanent nature because this stuff will – has the potential to continue and grow for years to come.

00:30:35 MR. LAMBERT: This is Doug from Granite Grok. And I would just like to follow up on that particular question because we have got a local Senate race here in New Hampshire. And one of the candidates is really, really hitting on the present senator, the Republican John Sununu, as being in bed with you guys. (Chuckles.) Actually Big Oil – we see the commercials every 20 minutes on TV.

And one of the things that the challenger claims is that with renewable and alternative energy, it would look to create millions of jobs. And, you know, that struck me because I am somewhat familiar. I do work in the power generation industry. And just like you spoke of these quality jobs and good numbers of fairly well-paying jobs, I have got to believe that the present industry supplies or provides maybe millions of jobs. But do you have any – do you have a feel for how many people directly or indirectly are employed in the industry present? And what the kinds of expansion that you would like

to see domestically – what that might bring for a future job potential – like real numbers that I can use to maybe take on some of these claims?

00:31:56 MR. CAVANEY: We use a 1.9 million for the total oil and gas. And if you want to look to the upstream side, which we have been talking about in terms of the offshore activity, you are looking at 200,000 of that would be upstream. And the rest, obviously, is the larger numbers that come with the retail and the distribution and the like.

But again, those are direct. They don't cover all the ancillary kinds of jobs. And that is what we think is particularly important about – our materials that we produce, oil and natural gas, you know, they are the building blocks. They then, whether it is through a refinery or wherever, they then have to undergo conversion steps before they get delivered to another product.

So a lot of our jobs have much – how should we say – are much higher paying, they are much more connected and concentrated for opportunity than, let's say, some of these green jobs that are being talked about when you are going to go put up a, let's say, a wind farm, you know. And you are going to have a lot of isolated things. Those are pretty simple skills. They're in one place, you have transition line and it moves on.

So we have found – and this isn't just our comments. It is from talking – the people that have been out trying to assess the job scene. One of the reasons why you are getting a good rush in college after several decades of not very many people being interested in our industry is they are seeing this potential for not only the jobs in the industry, but the ancillary jobs that come – that is chemical engineers and other kinds of folks taking these building blocks and moving them on.

00:37:37 MR. CARLOCK: This Peter from OPNTalk again. I want to – join what he was just talking about and what you just said. From all of the data that I have seen, as far as new jobs go, it seems like within – between six months and a year, we could have a great deal more jobs. I don't know the specific number. But when you are talking about all of this alternative energy and everything, we are looking at 10 to 20 years down the road. And when you look at the whole situation logically, you can't fly a plane with solar, can't really drive a car with solar. I mean, there's a lot of things that they have to overcome just to make it viable and affordable for everybody to go out and get.

We are not going to have – do away with oil and gas in the next six months and then have all these great jobs that they are talking they are creating. I think we can do both at the same time.

00:34:37 MR. CAVANEY: That is our point. Number one, we have said we need all forms of energy. And we say that because you want to get as many new forms of energy out there active to see which ones can ultimately become competitive without huge subsidies and may be a part of that next generation of energy. You know, it isn't

going to magically appear overnight. But there is no scenario that we have seen from any respected think tank or government that looks at the demands for oil, natural gas going forward that doesn't show it being basically the cornerstone of any effort that you use.

The people that talked about next generation of a car – they are going to run on, let's say, electricity. Well, that is fine. But you want to talk about the job component, it goes to the point I made – you go out to a job source where you are going to create electricity. It goes on a transmission line, ends up, gets plugged in. You are not creating out of those things the kind of secondary job growth and the opportunities for derivative products to the same extent that you would where we are.

So we think that we are going to continue to be a job creator here. If we get this increased access, we think that you are going to end up finding petroleum products are going to stay and be an important part for a long, long period of time. There are people that you talk to and that work with a lot of the auto companies. And when you look at whether it was fuel cells in the early rage or some of these others now, you will find that there is a lot of people that feel the more we can get the fuels cleaned up, the improvements that have yet to be realized, the internal combustion engine, and also the things that can be done by converging the electric technology, that you may well find that in the future looking at, you know, one of these variations of, let's say, take 10 years added on to one of the current-day hybrids, you could have a car that has very, very, very few emissions, that had yet, the kind of mileage equivalent to whatever a fuel cell is going to produce at that time and give you the kind of range you need.

So this race is by no means over yet. But we do want to see more forms of energy and others come up with ideas. That is generally – in our industry, the big game changers have all been written by technology, not by some mandate or by some declarative law that is going to do something.

00:37:10 MS. MCCANN: This is Joy McCann, just following up on that. I know you guys covered natural gas. Has there been a lot of experimentation in terms of methanol? Is that something that we are going to be seeing in any increased use of or availability of outside the race tracks?

00:37:30 MR. CAVANEY: Well, let me have one of our experts who has worked in this for a long time. We've got a couple folks here that can do it. Sara, do you want to start?

00:37:37 SARA BANASZAK: Actually, Prentiss is going to start and then I'll fill in.

00:37:40 PRENTISS SEARLES: Okay, methanol –

00:37:41 MS. VAN RYAN: Announce who you are.

00:37:42 MR. SEARLES: I'm sorry. I'm Prentiss Searles. I'm the marketing issues manager and methanol is a product that has a lot of challenges that are associated with it, not the least of which is toxicity. It's unlikely from the information that I've read that it's going to be a new upcoming fuel. It was tried in the past and was really unsuccessful at that point. And people are going to use the ethanol which is a product that they understand better and doesn't have the same characteristics as methanol.

00:38:23 MS. BANASZAK: Hello. This is Sara Banaszak. I'm one of the senior economists here. I wasn't sure initially if you strictly meant methanol or if you also meant methane or natural gas use in the transportation sector because we do see some use of natural gas in the transportation sector but it actually turns out that liquid petroleum carbons tend to be the most efficient way of packing carbon into a moving vehicle.

So there's a lot of lack of cost competitiveness in the natural gas vehicle market. It's not strictly commercially competitive with petroleum-fueled vehicles at this point.

00:39:00 MR. BURN: This is Joules Burn from the Oil Drum and I would like to deviate back to the inventory problem. What are the remaining bottlenecks from production, both from importing oil through the Gulf of Mexico and from bringing in oil from the platforms and getting it refined and into the pipeline.

And it seems that Mexico has recently – they're going to – they've shut down some of their production because they can't bring it into the United States. What is the situation with the Houston Ship Channel and is the LOOP currently operating at full capacity in terms of offloading and tankers?

00:39:50 TIM SAMPSON: Tim Sampson. I – the latest report from DOE shows the LOOP is functioning.

00:39:58 MR. BURN: Well, is it functioning at full capacity is the question.

00:40:01 MR. SAMPSON: Let me look at this DOE report I have here and get back with you on this.

00:40:07 MR. BURN: The big question in terms of – you know, is how fast will it take to – how long will it take to refill the inventories into the Southeast? And that's a combination of basically all of the various bottlenecks in the system being relieved because you just – solving one part of the problem doesn't address the whole network.

00:40:30 MS. BANASZAK: So there's a little more detail than just asking about the LOOP. Again, this is Sara Banaszak, senior economist. I mean, one thing we have seen both three years ago with Katrina and Rita and this time around with Gustav and Ike is that in terms of getting all of the waterways open and operational back up to full scale, it does take time. You know, you're putting back in place a lot of buoys; you're clearing waterways.

So they tend to open up initially for lesser draft ships and during daylight hours and then they slowly scale up to full operation. So I think, you know, it is a process of definitely taking some time in the aftermath of these major hurricanes.

00:41:11 MR. CAVANEY: I think, to your other point, you know, what's going on right now is that anybody who's got fuel in tanks or in transit or wherever, if they can get it out, they are. So when you start to refuel, I don't know, Sarah, if there's any calculation that's been done, it is going to take a while to backload that system back up to where it is.

So, luckily, we're in a slower season and now and coming up than we have been. So if we can get these refineries back, you can bet that their utilization rate is going to go up and make sure that pipeline gets filled.

00:41:45 MS. TVERBERG: I have a related question. This is Gail Tverberg from the Oil Drum. So is part of the issue too – suppose you could suddenly fill up at Houston or wherever, you could fill up the oil lines completely, the pipelines. Does also the three to five miles per hour, that time lag, does that also enter into it so that it's – you don't really get the full impact until that oil actually reaches Atlanta, for example?

00:42:19 MR. CAVANEY: Yeah, that's correct. You can't speed up appreciably any of that fuel equivalent through the line. So where we are now, all of the pipelines, all of the oil pipelines that are moving products are operational, they're at reduced rates and it's not because they don't have the power they need; it's because they don't have the product. And that's why we need to get these refineries back up and it'll be moving much more efficiently, obviously, once you get the pipeline up with high volumes moving rather than the reduced volumes, which is where they are now.

00:42:53 MS. MCCANN: Hi, this is Joy McCann. I have one more quick one and that has to do with this figure that we keep hearing about how the U.S. has only two or three percent of the world's oil reserves. Right now in front of me I have a chart from the Energy Information Administration, which is supposedly run by the U.S. government, that essentially seems to be using the old figures. And so I'm wondering how I can, how the technologies have changed in terms of measuring our oil reserves, how I can explain to my liberal friends and my readers how this has, you know, how the new measurement methods are more sophisticated because I'm looking at figures that basically say, you know what? There isn't any oil; forget it. There's no oil on the OCS; forget it.

And I know differently, but I'm just wondering what the differences in methodology are compared to what we were doing 20 years ago that everyone's parroting those figures.

00:43:58 MR. CAVANEY: Okay, well, let me give you a couple of hard examples – and I think Jane can give you even more precise data when I get done. But let's start with three examples, each from a different area. Because the estimate is not

only a function of the quality of the seismic that goes out and interprets it, it's also – it's also because many of these are extended fields. The technological gains that are made in extraction – it's the technological gains from the enhanced oil recovery and other kinds of things that go along with it.

And a couple of examples why you shouldn't take the – not that the government figures are wrong in and of themselves, because they were probably accurate at the time they were shot with the knowledge they had at the time. But let's look at – start with Prudhoe Bay. When the government first assessed the numbers that they had out there before they actually started, I believe was just short of 10 billion barrels, nine and some change. I believe now and have got somebody who spends a lot of time up on the North Slope across the table from me, but I think they are at about 22 or 23 now.

99:45:04 MR. RANGER: Well, it's 18 and they've shipped 15.

00:45:08 MR. CAVANEY: And, you know, there's an expectation that they're going to go well beyond that by also being able to cut in some of the satellite fields that are around there. So it's going to far exceed - not that their initial estimate was wrong, but because of the other reasons.

Now, let's go out and look at the Gulf of Mexico. If you look at the early Gulf of Mexico estimates, we've already shipped more out of the Gulf of Mexico than they said that was there to begin with. And the most classic case is the Bakken formation up in the northern part of North Dakota and the northeastern part of Montana and Saskatchewan, where as late ago as 1995, they estimated they had 165 million barrels of reserves and I believe the number they use today is 3.6 billion of reserves. And that had less to do with the technology that was used at the time the originate estimates were made than it has in the technology game in the extraction that we've learned and how we know how to get at those fields and get it out.

So it's really not accurate for people to go around and fixate like this two or three percent that they talk about is an absolute, unequivocal number and that's where it is and where it's going to be. You get things in several ways: the seismic that was used, Tim and others who are here could comment on it. It's at least two or three generations old in terms of its capability and what we use today. So you're starting with something that will give you a low base and there isn't any factoring in yet and you won't know that until you get into the field what exactly you can use or what prescription to get the most amount of product out of the ground.

00:46:53 MS. MCCANN: Perfect. One more thing. My pen ran out of ink. What were those two numbers on Prudhoe Bay? What was it –

00:47:00 RICHARD RANGER: This is Richard Ranger. In 1977 when Prudhoe Bay was brought online, the reserve estimate result is 9 billion barrels. And we have produced and shipped 15 billion since that time and the current estimates are ranging north of 18 billion.

00:47:21 MS. MCCANN: How many more years do we expect Prudhoe Bay to be producing at a respectable level, a comparable level?

MR. RANGER: I don't know the answer to that. I have to get back to you on that. When they renewed the Trans-Alaska Pipeline lease in 2002, they did so for another 25 years. So they were really predicating that on the ability to produce, if not from Prudhoe, then, as Red mentioned, these other satellite fields such as the Alpine Field that's now producing west of Prudhoe Bay, Northstar, some of these others that are now feasible because of the infrastructure that was installed based upon the value of Prudhoe Bay.

(Cross talk.)

00:48:12 MR. STYLES: Can I just follow up on this because I think this is a hugely important – because there isn't an opponent of drilling out there, whether on the floor of the Congress or an environmental organization or anywhere who doesn't cite this 3 percent, 25-percent comparison as though it were some sort of thing written on a stone tablet. And the problem is, I mean, we all know, this can be refuted 17 different ways. But none of them so far as I'm aware has been reduced to an equally compelling sound bite and that's frankly what you need because, I mean, we know the reality that the U.S. had reserves 10 years ago that were 21 billion barrels and has reserves today of 20 billion barrels.

We produced 22 billion in the meantime. So, I mean, clearly, proved reserves are not an estimate of future production in the same way that people are using them and, yet, that's a much longer explanation, as are all of these other conversations, than the folks that are doing government by sound bites can cope with. We need the sound bites.

00:49:11 MS. MCCANN: Just one more quick little follow-up on that and that is the charge that we use 20 percent of the world's petroleum reserves: Doesn't that have to do with the fact that we are behind a lot of science and technology and military protection? Isn't that a lot due to the fact that we do a lot of stuff overseas?

00:49:34 MR. CAVANEY: Yeah, the one point that's oftentimes used is you have, you know, 5 percent of the world's population and you use 25 percent of that. But the more accurate thing that you ought to compare is, what is your output compared to the amount of energy that you use, fuel that you use. And there they're fairly close. So we're not as efficient maybe as in some other places, but, again, it's an apples-oranges comparison, the sound bite, the bumper sticker, whatever you want to call it. Sarah, you were going to mention something on the previous point?

00:50:04 MS. BANASZAK: Well, in the effort of coming up with a better sound bite, you're right, it's a complex issue, and all we can do is try and communicate. But the other way of looking at the equation that gets glossed over is that we're still a significant producer, and that when you compare these reserves to other reserves around the world,

they may not size up to the scale of Saudi Arabia. But in our ability to produce oil when we're consuming oil, we have a strong ability to produce from these reserves that are off limits. They could also – (background noise, inaudible). We are today the world's third-largest producer of oil. People don't realize that. We produce 8 percent of the world's oil production. Saudi Arabia produces 12 percent – they're number one, and Russia produces 12 percent, they're number two. So we are a sizeable player in oil production, and we could stay that way with access to these resources.

00:50:50 MR. BURN: This is Joules Burn, I'd like to jump in again with the, and kind of deviate away from the defending of oil in the U.S. and all that, and think about, ask a question about the API's view on what type of flows are realistically possible if all the OCS was opened up. Given that the vast majority of these are classified as undiscovered resources, that means that there has been nothing, no seismic out there, nothing drilled, just an estimate from a bunch of people in a room thinking, okay, how much oil could be out there?

And so, based on those particular estimates, and there's nothing factual about it, it's basically a guess, so starting from the point of actually going out there and looking, and doing the exploratory drilling and finding stuff to actually bringing that oil to market, let's say for a five-year estimate and maybe a ten-year estimate, what are the best cases in terms of barrels per day that U.S. could be delivering from the OCS resources? And think about that in terms of resource numbers, which is a reserves number, which is highly suspect from both the positive and the negative side.

00:52:12 MR. CAVANEY: We share the same interest in being able to nail that number with you. So much so that after years of frankly lobbying, trying to get the government to approve spending the money to go do an inventory of what is, what are the reserves that are out there? It's finally in the energy policy act of 2005, it got included. But guess what. We could never get the money appropriated from Congress to go out and physically do it, so as a result, you don't have it. So the answer is, you are absolutely right. You've just got a bunch of best guessers out there.

Now the flip side of that is, okay, let's think about this. The private sector, given the opportunity for access, is willing to go out there and spend billions and billions of dollars to take the risk in the almost absence of information, as you would call it, today. And isn't that a whole lot better than either leaving it totally alone, or waiting for the government to do that? And can you imagine the political problem after they drill five or six dry holes and spent \$5 billion dollars, what would happen.

So, it is a tough, tough road, but let me just bounce a figure off you to show you, in spite of how difficult it is to get a true measure of what's out there. The industry, over the last 12 months, these are bonus bids, these are actual checks written to the federal government to go get leases, our industry bid over \$9 billion and actually won those bids, and that's money that went directly to the federal government. That doesn't count the royalties that will flow from them, or the rental payments that we'll have to pay during the course of the lift.

So hit the nail on the head, but if you can't get the government to do it, then what's your next best thing? Make the lands available, have the private sector, and throw their shareholders money at it. Some of them will win and some of them will lose, but that's the only way that you're going to get an answer to it.

00:54:17 MS. MCCANN: Can I just throw one thing in because, again, I'm off, right off of the Pacific Ocean and I'm very, very close to the third largest, the third most productive facility, or rig, in the whole country. And we know, I mean, we have established reservoirs, huge reservoirs off of the Pacific. And some of them are, the one that we have now in Long Beach that's so productive is right there in the Harbor. But we know that there are some that could be placed right out of sight beyond shoreline that contains a huge reserve. So it's not like we're just sort of, drilling in the dark here.

00:54:55 MR. CAVANEY: Yeah, you're absolutely correct, and one of the reasons why I raised the issue earlier in this discussion about when people talk about opening the OCS, and some people want to open it 100 miles out, well, any of us who are from the Pacific know, if you go 100 miles off the Pacific shoreline, you're going to come up with a goose egg probably 99 times out of 100. But if you go in close, within the 50 miles, or within the sight line, whatever you want to call it, there are very, very attractive reserves there. And I think what we've proved through four incredible hurricanes in the last three years, is we've got the technology, we've got the environmental sensitivity, willing to put the money into making sure that those platforms can take the hardest that Mother Nature can give them and still not end up discharging any production related oil into the sea.

00:55:51 MS. MCCANN: Well my understanding is that all we need to make sure that they are invisible from shore is 12 to maybe 20 at the outside if there's a high-rise on the shore.

MR. CAVANEY: Yeah, I think –

MS. MCCANN: 50 miles is ridiculous then.

00:56:05 MR. CAVANEY: Yeah, I think the view is pretty typically on the short side for a lower rig, it's probably about 12 miles if you're standing on the shoreline, and probably on the outside it's out there 15, 16, 17, somewhere in that range. It depends strictly on the height of the rig, because the shape of the globe doesn't change much. But that's –

00:56:25 MS. MCCANN: Well, then when do we need 100 miles? Isn't that just a way of sabotaging the effort?

00:56:31 MR. CAVANEY: Absolutely, and that's our point, is we're trying to – (inaudible, audio difficulties) – I mentioned a at the beginning of the program, if somebody says, well we're for drilling and we're going to open up everything from 100

miles out, well, there's going to a lot of people that will be disappointed, and you know what they will do? They will come and blame the industry for not doing it. Well, yeah, we wouldn't do it because the likelihood, particularly on the west coast of getting a find for the amount of investing that you'd have to make is very, very low. So if the real effort is to find oil and gas, it's like Willie Sutton said when he wanted to rob a bank. You have to go where the resource is, you know? And so he went to a bank when he wanted money. If we're really about oil and gas, we need to go where we know, with a good degree of certainty, that there are fields. And we do know off the East Coast, and those are not government estimates. We know from some wells that were drilled out there exploratory nature and otherwise. So, that's our point.

00:57:27 MS. VAN RYAN: Red, let me insert a question here that's been sent to me on my BlackBerry from a blogger. He says that he is – very different topic – he said, “I witnessed firsthand the impact of the economic crisis during the 1980s, which saw some 400,000 oil field workers lose their jobs. With that in mind, I'm wondering what you're hearing from people in the oil patch, onshore and offshore, about contingency planning as it concerns dealing with the credit crisis, employment trends, exploration.”

00:57:54 MR. CAVANEY: I think these is unfortunately a case, again, of communication. All we hear about is emergency bailout for Wall Street and the like. And what most people don't understand – I used to be a banker in one of my former lives – what most people don't understand is our economy runs on credit. All the way from people who make most of their purchases on credit cards, to small businesses who usually get a line of credit to help them get the materials in to sell to people who are out running businesses like those that are out, particularly onshore. And got a couple of rig crews that are out there that he's got to pay before the stuff comes in. They are all on credit.

What has happened is basically, the commercial credit market, or commercial paper has pretty much – (inaudible) – by some of the actions that are being proposed, which has forced those borrowers into limited amounts of capital. And if you are hearing from all parts of the sector now, the strain of not being able to get access to the amount of borrowing that they usually have, and that's why there is a sense of urgency on getting this matter resolved. Because if you don't open up the floodgates and the flexibility and take some of the bad stuff out of the system, you're not going to free up lending to the extent that you need it. So it may not be with everybody out in the oil field, but today's problems that they are all feeling, but if this thing were to go on for a couple more weeks where we're starting to dry up, I can see a big impact.

00:59:32 MS. VAN RYAN: Folks, we've been together on the phone now for a little over an hour. Red, do you have any more time, or do you need to bail?

MR. CAVANEY: No I think this is a fun way to spend your Friday afternoon. (Laughter.) I hope this was helpful to you all. I think that this may be near one of my last one of these and I appreciate your time.

00:59:48 MS. VAN RYAN: Well, that's true. We probably ought to tell them that you're planning to retire and you're not going to be with us a whole lot longer.

MR. CAVANEY: I retire on November 1st so I'll finish my tenure here and go do something else.

00:59:58 MS. VAN RYAN: That's if we let you. We might keep you like tie you to the desk or something here if – (inaudible) – questions. Do you have time for another question perhaps, maybe two? Anybody have any other follow-up questions?

01:00:11 MR. ADVOCATE: Jane, this is Devil's Advocate. I just have a quick question for you. You said that the transcript is going to be up on the blog either this weekend or Monday. Is that correct?

01:00:20 MS. VAN RYAN: Yes. We're going to hope to get it up as early as tomorrow. That's our plan.

MR. ADVOCATE: Okay, perfect.

01:00:27 MS. KILKENNY: It's Cindy Kilkenny from fairly conservative in Brookfield, Wisconsin. I have a couple of questions from what I've heard. Litigation seems to be hampering America's ability to drill. Is that an appropriate counter to the argument that Americans should be drilling the current leases? Are those current leases locked up in court?

ERIK MILITO: What was the question again?

01:00:48 MR. CAVANEY: Heck, I got it. (Laughter.) First of all, the canard here is we ought to be drilling the leases that we hold; this is a case, again, where the bumper sticker – somebody thought they didn't send it out to use this, this idea that, gee, 90 percent of the lease is declared non-producing. Well, surprise, surprise. You spend probably 90 percent of the time and a good deal of the money going through the evaluation, exploration, going out, getting permits, having to fight in court to get it done and a whole series of things. And the only thing that's declared producing is when you've actually put in all of the equipment and you get your first barrel of oil or your first natural gas delivery.

So the point – and it's after about two months of battling – now you don't hear it as much as you used to. But if you look at – and I think there's some pretty good data that Jane might be able to share with you – if you go back and look at the 1996, '97 OCS leases, which have fun their full 10-year course and you go back and look at what the rate of hits, if you will – in other words, how many of those leases turned out to be producing leases, the margin is extraordinarily small and what it does, it basically says, you've got to go after 60 leases to get one. So your probability is one in 60.

So if you don't have a big inventory that you're constantly evaluating to choose the very best ones to go ahead and invest your money in, you're going to get no oil. And, in many cases, on both offshore and onshore, once you actually have the lease in hand and you go take a look at it and you actually shoot some seismic or other kinds of evaluations, so many of those are leases that there's no oil on or there's no oil or gas in a commercial quantity.

So the idea that you – that the government would make you spend your money to drill a dry hole in the dirt is patently absurd. I mean –

01:02:56 MS. KILKENNY: Well, that's typical. Patently absurd works as well.

(Laughter.)

01:03:02 MR. CAVANEY: It is, again, just like we talked about earlier. People are rolling the dice and spending a lot of money and you've got to be crazy not to be making the very, very best effort to go after the places that have the oil to drill. And, oh, by the way, once we get those leases, if you're not producing, we've got to pay an annual rental fee to the government every single year that we hold them.

And when the lease expires, if it's not producing, we've got to give it back and forego our lease bid and all of those individual payments you've made plus all of the money we spend. So it's this idea of drilling the leases you hold, it's –

01:03:38 MS. KILKENNY: So you'd prefer better odds. Another question has to do with Harry Reid's trying to slip in a moratoria on shale oil extraction. Give me a ratio if you need to pursue one thing as an industry, do you pursue offshore drilling at, say, 80 percent shale oil? At 20? Or is it 50-50? Or how do you guys break that one down?

01:04:04 MR. CAVANEY: What you need to have is you need to have a projection that would show that you're going to be able to get crude oil in certain amounts to satisfy your needs going forward. And as you look out 10 years, I don't know of anybody that thinks you're going to get output from shale within 10 years or so.

So any of this that you might say, you know, is one generation away from being in a position to have the prospects of getting volume to actually take to the bank, so to speak. So right now, most people that are going to be out there, I would say it's going to be 90-percent-plus are going to go after oil or natural gas.

There are companies, though, who are – some of them fairly far along in terms of the amount of research they've done, the work that they're doing and they're bringing it along. But I would say one thing that actually serves as a little bit of a setback for the amount of money that may otherwise have gone into shale was the tar sands. If you stop and think about it on a curve, what you've got is, if you go from more traditional oil and

gas that we've been talking about up to the oil sands in Canada, you know, those are a product where you're using bitumen. You've got to sort out the oil from there.

So there's a technique that needs to be involved to separate out the hydrocarbons that you're going to use. And it's apparently, because the technology is there, it's more cost effective to do that. So you get people, when you line up, where am I going to get my production for as I go forward, you know, you start with OCS offshore and onshore then you go over and probably look at oil sands and then, very possibly, if they can get a little further along on the research on it, shale would be the one that would follow.

01:05:58 MS. KILKENNY: Okay, so you're not going to panic yet. What areas would shale be in?

01:06:03 MR. CAVANEY: Well, the big areas are a three-state area, essentially the Rockies: Colorado, a little bit of Eastern Utah and the southern part of Wyoming. There is plenty, plenty there and what we need to remember is, these are long, long lead times and – (inaudible) – businesses. So in 20 years is not – it doesn't scare anybody off. It's just that you've got to make sure – so if you stall the research for, let's say, 10 years, you know, that's going to hurt.

01:06:38 MS. KILKENNY: Yeah, that got us into trouble again before. I see a South Carolina senator is having a cow and I didn't know if that was consistent with where the area is looking. So, thanks.

01:06:45 MR. MCCARTY: Hey, folks. This is Bob McCarty at bobmccarty.com. And I've been relatively quiet during this session. I appreciate it, the first time on. As the son of an independent petroleum geologist, exploration geologist, land man and sales man – he did it all – I know all about dry holes so – (laughter).

I'm also a former corporate spin doctor so I just take my hat off to you guys for dealing with this and I congratulate the guy who's retiring.

(Laughter.)

01:07:22 MR. CAVANEY: Well, thank you, Bob. I hope you found this helpful and we'll see you or hear you, I guess I should say, on a subsequent, one of our blogger calls.

(END)