

House of Commons CANADA

Standing Committee on Natural Resources

RNNR • NUMBER 030 • 3rd SESSION • 40th PARLIAMENT

EVIDENCE

Thursday, November 4, 2010

Chair

Mr. Leon Benoit

Standing Committee on Natural Resources

Thursday, November 4, 2010

● (1105)

[English]

The Chair (Mr. Leon Benoit (Vegreville—Wainwright, CPC)): I call the meeting to order.

Good morning, everyone. We're here today to continue our study on energy security. We're looking at the federal role in unconventional oil and gas development, such as deepwater offshore drilling—

A voice: Hi, this is St. John's. We're just wondering if we're ready to begin or if you began and we're not hearing you.

The Chair: Okay, that is good to know. We will try to correct it. Good morning. Hello, can you hear me?

A voice: There you are. The committee should hear you now.

Mr. Robert Cadigan (President and Chief Executive Officer, Newfoundland and Labrador Oil and Gas Industries Association): Good morning.

The Chair: Now you can hear us. That's great. Okay.

We had started. I really appreciate your pointing out that you couldn't hear us.

Mr. Cullen has a point of order. Start with that, Mr. Cullen. Go ahead.

Mr. Nathan Cullen (Skeena—Bulkley Valley, NDP): I'll be very brief, just before we get into this. The first point is on logistics. I don't know, but I've never seen a committee move around quite so much in terms of meeting rooms. I don't know if we'll eventually secure one or if the state of affairs for the committeewill be that we don't necessarily have a room. That's the first point.

Second, through you to the researchers, we're going to be getting into shale gas and some of these other technologies that I would suspect most committee members don't know a great deal about. I know you folks are busy, but it might be helpful if we had some more depth in terms of the preparatory notes about some of the industries we're about to go into. I think it's going to help committee members a lot as we get the witnesses in front of us.

We had this when we were doing the offshore part, but the notes that we received for today speculated some questions. Could there be something a bit more substantive about some of the technical aspects of industry and the state of development right now, shale gas being a good example? Some of the things these hearings are going into will be quite technical in nature, and we're going to have technical

witnesses. Sometimes committee members fly blind if they don't have some backup information.

David, I don't know if I'm missing something that was given out to committee members earlier.

The Chair: Go ahead, Mr. Anderson.

Mr. David Anderson (Cypress Hills—Grasslands, CPC): To try to spare the analysts some work, I'll check with Natural Resources to see what they have that's available. I would think there would be some material on these different things. We'll do that, and then if there is material, we'll try to get it to the committee.

Mr. Nathan Cullen: Chair, the nature of our study is unconventional oil and gas. While committee members may have had some experience with conventional oil and gas industries, this by its nature is going into some uncharted waters. Whatever we can get, whether it's from Natural Resources or our researchers, will help us direct our questions a lot better to the witnesses who come forward

The Chair: Thank you, Mr. Cullen.

The analysts do have information on all of the areas we're going to be looking at, so they will circulate some of that. It's difficult for them to know exactly what to circulate at what time. Certainly you could approach them, but we'll chat about that a little bit later and try to make sure the information is there in a timely fashion, and Mr. Anderson has generously offered some other information.

By the way, I appreciate that the witnesses who have agreed to come today did so on short notice. In terms of booking witnesses, five witnesses were approached. There were two requested by the NDP, one by the Liberals, and two by the Conservatives, who just couldn't or wouldn't come on such short notice, and that's understandable. From now on there will be more notice. It's really important for the committee to remember, as we're booking these things, to make decisions that allow booking further in advance. It's difficult to do sometimes. I understand that.

• (1110

Mr. Nathan Cullen: Chair, what we have for the next two months is some pretty good forewarning.

The Chair: We pretty much do. Yes, we do.

We will get now to the witnesses. Again, just to repeat, I thank both of you for agreeing to come on short notice. It's very much appreciated indeed. I will have you make your presentations, which can be up to seven minutes—I think there are only two of you—in the order that you appear on the agenda.

We will start with Mr. Robert Cadigan, president and chief executive officer of the Newfoundland and Labrador Oil and Gas Industries Association, who is appearing by video conference from St. John's, Newfoundland and Labrador.

Go ahead, please, for up to seven minutes.

Mr. Robert Cadigan: Good morning.

I'd like to thank you for the opportunity to speak about energy security and to speak to your committee. Certainly this is of primary importance to the membership of the Newfoundland and Labrador Oil and Gas Industries Association, the association I'm representing here today.

We have about 500 members in Canada and around the world, and NOIA is Canada's largest offshore petroleum association. As a little bit of background, our mission is to promote the development of east coast Canada's offshore hydrocarbon resources and to facilitate our membership's participation in the oil and gas industries.

While I'm addressing you as a representative of NOIA, the issues I outline do have an impact on Canada's energy security overall. For the most part I'll be speaking about the oil and gas industry in Newfoundland and Labrador because that's the area I work in and that I'm most familiar with.

We do believe, first and foremost, that we must develop our offshore resources safely, and certainly stewardship of our natural resources and protection of the environment remains an unwavering commitment from all of us who work and live on Canada's east coast

I'd like to give a brief background on the surprisingly long history of oil and gas in Newfoundland and Labrador.

It started with an 1812 discovery of an oil seep in Parson's Pond, which is on the northern peninsula on the west coast of Newfoundland. We had sporadic production in that area in the late 1800s and into the early 1900s from shallow wells. As you probably know, the first offshore well in Canada was drilled by Mobil on an artificial island off Prince Edward Island in the early 1940s. In 1979 we had the Hibernia discovery in Newfoundland and Labrador, with the first oil in 1997. It was the first project undertaken in ice-infested waters, and when you think of this, we have only been accessing our offshore oil and gas resources for about 10 years, but we do have reserve potential, and at the current time we're not seeing enough activity in terms of exploration.

Newfoundland and Labrador is the largest offshore energy producer in Canada. In Atlantic Canada our industry employs over 4,500 people directly and well in excess of 10,000 when you factor in indirect and induced jobs. Certainly in a world where global demand for energy is expected to more than double by 2050, as the economies in both the developed and emerging worlds continue to grow and as the standard of living improves for the developing world, the Atlantic Canada oil and gas industry has the potential to impact and enhance Canada's security in numerous ways, certainly on the supply side and also economically in terms of the benefits that accrue to our region. As the world moves to develop a culture of conservatism by maximizing renewable energy potential and developing energy alternatives to carbon-based fuels, the potential

of our offshore industry helps position Canada for an orderly transition toward a renewable future.

I'll give you some background on oil production. The production from Newfoundland and Labrador is responsible for about 40% of Canada's light conventional crude. The production comes from three fields: Hibernia, Terra Nova, and White Rose. While we have just short of three billion barrels of oil discovered in Newfoundland and Labrador, there remains the potential of about six billion barrels of oil to be discovered, and in Nova Scotia waters potentially about 2.6 billion barrels of oil remain, according to the Canada-Nova Scotia Offshore Petroleum Board. To date, over \$16 billion has been invested in development, with Hebron, the Newfoundland and Labrador offshore project, set to contribute an additional \$4 billion to \$6 billion during its construction phase. We have another development called Hibernia South, and that will contribute, again, about another \$2 billion in investment in our offshore industry. Operating expenditures contribute over \$1.5 billion in spending, with the majority of that spending occurring in Atlantic Canada.

In terms of our natural gas resources, I'm dealing with the offshore resources. I've heard you folks talk about shale, but I'll be focusing on the offshore aspect.

• (1115)

In addition to Newfoundland and Labrador's proven natural gas reserves of about 10 Tcf—that's trillion cubic feet—another 60 Tcf are estimated to be available to be discovered. Nova Scotia's offshore has an estimate of about 29 Tcf of potential in terms of natural gas.

Our natural gas resources on the east coast, particularly Newfoundland, await favourable market conditions. Certainly the price of natural gas is at a historic low. From an environmental perspective, our natural gas produces about six times less carbon emissions than coal. This resource can certainly help replace coal-fired electricity generation, reducing Canada's and North America's carbon footprint overall if it's fully exploited.

I'd like to bring your attention to a slide called "Production Profile - March 2010" in your package. If you look at that slide, you can see that Newfoundland and Labrador offshore production actually peaked in 2007-2008. You can see the original Hibernia fields in navy blue, and the Hebron fields, which will begin production in about 2017, in the darker green. While we've had great success in terms of production, and great benefits from the industry, we do need exploration to keep this production profile flat and to have these benefits continue to accrue far into the future.

Despite the unprecedented high prices and rapidly increasing long-term demand that drives intense exploration in other basins around the world, exploration activity in offshore Atlantic Canada hasn't seen that same significant increase. In order to unlock this Canadian energy potential, NOIA believes the Government of Canada can help stimulate activity.

We only have to look at a comparison of the Newfoundland and Labrador offshore area and the North Sea to get a sense of the light levels of exploration we've seen. Our offshore area in Newfoundland and Labrador is about four times the size of the North Sea, yet to date we've only seen about 140 exploration wells; in the North Sea, they've seen over 4,000 exploration wells since inception.

Why is that? Certainly this is partially due to our environment. The east coast of Canada is a harsh environment. We have high sea states, fog, sea ice, and icebergs, and drilling wells off the east coast is extremely costly. International oil companies require certainty, and they try to minimize financial risk. We see that in the attraction of capital to the oil sands, which is largely based on a known quantifiable resource. The variables of the costs of development and production are relatively easily factored in, the price of oil a little less so

To explore offshore is extremely expensive. In the area of the Grand Banks, where there is generally less than 100 metres of water, a well will cost anywhere from \$30 million to \$50 million to drill. When we move to the deeper frontier basins, the price tag for an offshore well can be in excess of \$200 million. When you consider find rates are typically 10% or less, placing this sort of a bet to make a discovery is a risky business.

• (1120)

The Chair: Excuse me, Mr. Cadigan; you've gone over the time allocated for the presentation. Could you wrap it up very quickly, please?

Mr. Robert Cadigan: Sure.

A quick look at the exploration chart that I've provided shows that in Atlantic Canada, and in Newfoundland in particular, the number of exploration wells was significantly high in the 1970s and into the 1980s, with a drop-off in the early 1990s and relatively sporadic activity since then. In the last 20 years, we've averaged probably about two wells a year or less.

What can the Government of Canada do to help improve on this exploration record? Certainly one thing is funding of the GSC to improve resource assessment and create basin atlases is a very important step. You can question me on that if you wish.

There are other regulatory impediments under the Coasting Trade Act and the Transport Canada regulations that create difficulty in bring seismic vessels into early exploration work. That's another important area.

We also have issues around land tenure policy. Basically, in Canada a significant discovery is held in perpetuity, so in terms of incentive to develop, it's really up to the oil companies to decide when to develop a particular resource discovery.

The other issue is in terms of our access to infrastructure, which is important. Small finds will remain undeveloped unless there is a regime to give other companies access to infrastructure to produce from small fields.

To sum up, exploration is a rate-determining step for the oil and gas industry. Without exploration there'll be no new discoveries, no new developments, and no contribution of major capital projects in the region. No new production can come on stream to replace depleting reserves, and in order to provide a sustained opportunity and to maximize the return to the Government of Canada and to the Province of Newfoundland and Labrador in terms of royalties and revenues, we need more exploration. Certainly that's one area the Government of Canada can really assist with, and this will have an impact on our energy security in the long term.

The Chair: Thank you, Mr. Cadigan, for your presentation. It was much appreciated.

We now have with us in the room William Amos, director of the University of Ottawa-Ecojustice Environmental Law Clinic. He is with Ecojustice Canada.

Please go ahead with your presentation. You have up to seven minutes

Mr. William Amos (Director, University of Ottawa-Ecojustice Environmental Law Clinic, Ecojustice Canada): Thank you, Chair

Thanks to the members for having us. It's a real privilege to be speaking on behalf of Ecojustice. Certainly the topic you have embarked upon is one of primary importance to Canadians, as it is this committee, despite the fact that there is a steep learning curve right now.

I'll say just a couple of words to introduce you to Ecojustice. Ecojustice is Canada's premier public-interest environmental law organization. In shorthand, we're the environmental movement's lawyers. We do pro bono work. We don't accept funds from the Canadian government or any other government. We have a very tight corporate funding screen. Effectively we are a charitable organization that chooses cases and law reform projects on the basis of the strategic importance to the protection of Canadians' environment. We get a lot of requests for representation and for assistance and engagement on federal and provincial-territorial law reform projects. We're very picky. This is a file that's of primary importance to us; offshore oil has been identified as something that's very relevant to the environmental movement, and we will be investing in that regard.

To achieve that objective, we will be representing environmental groups in the context of the National Energy Board's Arctic offshore hearing. Our presence will be felt there, but we think the discussion of energy security extends beyond the Arctic offshore. As the previous witness indicated, this issue of energy security extends to the Atlantic, goes into the Gulf of St. Lawrence, and, despite the de facto moratorium, is still a major issue on the west coast. This is an issue that is really multi-faceted, and it's difficult to present all the most important facets in seven minutes.

I will start off with the big-picture comment, though. From Ecojustice's perspective—and I think it's safe to say from the environmental movement's perspective—any notion that energy security is to be defined in terms of ensuring an adequate supply alone, without ensuring that conservation goals are set or that cultural, social, and environmental security risks are addressed, would be inadequate.

I don't use those words lightly. Cultural security is of primary importance in the context of the National Energy Board's Arctic offshore review. If there is a BP-like spill in the Arctic, there will be cultural loss, and that is a fact. As well, if there is a catastrophic spill off the east coast—or in the gulf, for that matter—there will be cultural loss. Communities that have been based for many years on tourism and fisheries industries could be decimated.

So the context of energy security is a broad one, and I urge this committee to take on that mantle and to look at these issues as broadly as possible.

First off, I'd like to say that the federal government's primary response in the post-BP era to the issue of energy security has been the National Energy Board's Arctic offshore review. When questions are raised in the House of Commons, the response is typically that the National Energy Board is looking into these issues.

There is certainly merit in having the National Energy Board examine issues related to Arctic offshore safety and environmental requirements. There is nothing wrong with that. However, as has been articulated on many occasions by civil society groups and by first nations groups, there is a need to look more broadly at this issue, and I'm thinking particularly of the offshore issue. I'm focusing primarily on the offshore aspect, not on other unconventional sources, although those are also important to Ecojustice. We are certainly doing lots of work in the area of tar sands, or oil sands, as the individual chooses to define it.

• (1125)

I'd like to raise a few cautionary flags. First, I think it's fair to say that many Canadians are becoming more and more familiar with this issue of offshore energy and more and more concerned about the levels of transparency regarding the federal government's policy responses post-BP. It's only now becoming clear that there are discussions between the Government of Quebec, the Government of New Brunswick, the Government of P.E.I., and the federal government over shared jurisdiction. As these are matters of fundamental national importance, they ought to be debated publicly, but we don't feel that this debate is happening right now.

While the response seems to have been that there's a National Energy Board hearing, there certainly are issues that have been raised about the appropriateness of the current regulatory regime that have not been addressed publicly. The National Energy Board hearing is not mandated to look into the entire regulatory structure for the offshore. What they are mandated to look at is far more restricted. What we need right now is a full-blown examination of the offshore regulatory regime in this country—and not just for the Arctic, but for the east coast as well. The jurisdictional issues complicate this situation, but there are many good reasons for looking at it more broadly than the National Energy Board hearing is doing.

Much has certainly been done in the U.S. as regards a gap analysis, identifying the potential regulatory weaknesses that exist and comparing those weaknesses and strengths with those of other countries. I'm not certain that's being done here in Canada, and that's a matter of major concern.

To conclude, I want to highlight two key issues that I think go to how—

● (1130)

The Chair: Mr. Amos, you're over the time allocated. Could you do it in 30 seconds?

Mr. William Amos: I can do that.

The Chair: Just provide highlights and count on members' questions to get the other information out.

Mr. William Amos: Sure, I can do that.

To conclude, there's a lot of action happening in the United States, a lot of response to BP, and that's understandable. Why isn't there the same level of response here in Canada? The U.S. Secretary of the Interior, Ken Salazar, proposed yesterday the establishment of an ocean energy safety institute to facilitate research and development, training, and implementation of safety and environmental standards. Where is the proposal for that kind of initiative here in Canada?

Finally, the Canadian Polar Commission has no board of directors appointed right now. One of its mandates is to engage in research related to the Arctic, including scientific research. We need this done, but our institutions either don't exist or are not capable.

We have some serious issues that need addressing.

I appreciate your time.

The Chair: Thank you very much for your presentation.

We go now to questions, starting with Monsieur Coderre. You have up to seven minutes.

Go ahead, Monsieur Coderre.

Hon. Denis Coderre (Bourassa, Lib.): I'm going to split my time with my colleague, Scott Andrews, who has a few questions.

As a start, Mr. Cadigan, every time we talk about offshore drilling, we're of course thinking about BP. Yes, we can talk about energy security and energy demands and all that, but what's your perception of the actual status regarding emergency response? You can have a lot of collateral damage, especially with deep drilling; how do you work with other stakeholders to make sure you cover those questions at the same time?

Also, tell me what you think about the regulatory system. Are you satisfied with it?

Mr. Robert Cadigan: Certainly, Monsieur Coderre, the purpose today, as I understood it, was energy security. The environmental protection side of things is not my area of expertise. Having said that, our regulator of the offshore area of Newfoundland and Labrador and the board in Nova Scotia have strong reputations. Internationally and in other areas, they're known to other regulators for being competent in what they do.

In terms of the regulatory regime, the bulk of production and activity in Canada's offshore has been off Newfoundland and Labrador. In my view, therefore, Canadian experience in managing these issues is certainly strong, and the experience is there with the Canada-Newfoundland and Labrador Offshore Petroleum Board.

Hon. Denis Coderre: Do you feel you have had to adjust since the BP spill?

Mr. Robert Cadigan: Certainly. The reaction of the offshore petroleum board, the regulator in Newfoundland and Labrador, was to put in some additional oversight procedures. We did have a deepwater well being drilled shortly after the Macondo incident, and those oversight procedures included having staff on board stop work as they approached a hydrocarbon-bearing zone and do a cycle of testing of equipment and procedures before they actually entered the hydrocarbon-bearing zone.

In our view, they took a fairly conservative and very careful approach to ensure that we didn't have similar events here.

Hon. Denis Coderre: Mr. Amos, I believe, like you, that it's not an à la carte menu. You need a balanced approach. You have to cover the needs of Canadian people regarding their energy safety and security, but safety is also an issue, and you don't want to have collateral damage.

On a technical basis, how do you reconcile the fact that the NEB has a regulatory power with the need to be respectful of the jurisdiction because it is owned by the provinces and the territory, except at the Arctic level? How can you believe that the NEB can be efficient as a watchdog in the case of what I mentioned earlier regarding emergencies and all that?

• (1135)

Mr. William Amos: If your question is directed to spill response in particular, I think it's a challenging question. I think the NEB recognizes it's a challenging question, and that's why it's front and centre in the Arctic offshore hearing.

Specifically, the NEB has indicated that in the scope of its review it will be examining the issue of responding effectively when things go wrong, such as the effectiveness and availability of spill containment and cleanup options under Arctic conditions, financing spill cleanup, restoration and compensation for loss or damage, and the state of knowledge about long-term impacts of a spill on the environment.

When I read between the lines of that scope of inquiry, my understanding is there are a lot of uncertainties with regard to what happens if there's a spill in the Arctic? Is there capacity? I think the short answer can be seen when you look at the length of time it took to bring the Macondo well under control and the number of vessels that were brought in. Over 700 vessels were brought in. There's no way 700 vessels are going to get to the Arctic.

Every spill is a different situation. There are small spills and large spills, and obviously the BP incident was a large one. It points to the fact that the NEB wants civil society, industry, first nations, and citizens' input into these what-if questions. It has jurisdiction to deal with the regulatory regime for drilling in the north. However, it's fair to say there are others, such as the coast guard, who would be engaged. There are a whole suite of other players who would be engaged, including territorial governments. First nations governments would be involved as well, because the Inuvialuit have a land claim settlement up north. It would be complicated.

The challenge in Canada is that this is just the Arctic. Then you have to look at what happens out east, because there's a whole different set of arrangements. We have the two different offshore petroleum boards that have different lines of accountability for spill response.

I don't think Canadians are comfortable with the idea that they don't understand how things work. The reality is that highly intelligent people—and I presume the vast majority of us around this table consider ourselves highly intelligent people—don't fully grasp how it would work and what would happen if there was a spill. I don't think that's acceptable.

Hon. Denis Coderre: I'm going to let my colleague ask the last question.

The Chair: You have 30 seconds.

Mr. Scott Andrews (Avalon, Lib.): I'll throw the question out quite quickly to Mr. Cadigan. Near the end of your presentation you talked about seismic vessels and some of the impediments to doing exploration. We see your graph here, and there was a lot of exploration through the 1980s and into the 1990s. By 2000 exploration has dropped off.

Obviously seismic testing is one of the first things you do. You mentioned there were some impediments to vessels in doing seismic work. Could you elaborate on that?

Mr. Robert Cadigan: Sure. In terms of vessels entering Canada, most of the international seismic contractors are foreign. What happens basically is that an oil company will look at a seismic program in an area. They have to go out and find the most competent contractor to do the work. They define the technical requirements of the vessels and the technology to be used.

Regulations under the Coasting Trade Act were designed to regulate the transportation of goods on Canadian vessels in particular and to provide business security for Canadian shipowners and shipbuilders. What has happened is that inadvertently these regulations impact seismic vessels as well.

The basic problem is that after an oil company decides on a piece of work, finds the best contractor internationally, and goes to the Canadian Transportation Agency to get an exemption to bring that vessel into Canada and do the work, under the CTA regulations any Canadian shipowner can protest. That basically causes somewhat of a delay. We've seen examples of protests that could only be described as frivolous causing significant delays in the approval of programs.

We had a recent example this past summer with a seismic program that was to take place in Labrador and off the southwest coast of Newfoundland. A Canadian company has a vessel laid up in Louisiana, "laid up" being a term used by classification societies to indicate that the vessel needs remedial work before it can take to sea. The Canadian company doesn't have a sea-ready vessel and is unable to meet the technology requirements of the particular oil company in this case, but yet can frustrate the process by virtue of this ability to protest under the CTA.

In 2009 the Canadian Transportation Agency had a consultation. NOIA and a number of other organizations did ask for an exemption or for other ways to reduce this problem. The review was completed, and there was no solution found. Our concern—

• (1140

The Chair: Thank you, Mr. Cadigan. I have to cut in there. We have three more questioners and we have very little time.

We have Madame Brunelle. You have up to seven minutes. Go ahead, please.

[Translation]

Ms. Paule Brunelle (Trois-Rivières, BQ): Good morning, Mr. Cadigan. It is a pleasure to have you with us.

You represent the oil and gas industry. In your presentation, you said that we have to develop our resources in a safe manner, environmentally speaking. The oil spill in the Gulf of Mexico has really shaken people all over the world.

What specific changes are you going to bring to your drilling techniques? What lessons has your industry learned from this event? [English]

Mr. Robert Cadigan: We at NOIA represent the supply and service sector, the contractors who do most of the work for the oil companies in terms of exploration and production.

Basically any industrial activity has risks. We've seen that issue recently in the collapse of a dam in Hungary, for example. There will always be risk associated with any kind of industrial activity.

I think the important part is that we do things carefully. We do have a sound regulatory regime, in our view, in the two jurisdictions in Atlantic Canada. In terms of the response of the Canada-Newfoundland Offshore Petroleum Board after the Macondo spill, we've seen additional steps and additional care being taken.

I think that at the end of the day lessons are going to be learned from Macondo. When all of the reports are released, I think what we need to do then is compare what's happened—the failures, in that case—with our own regulatory regime and adjust accordingly, but we have full confidence in our regulator.

[Translation]

Ms. Paule Brunelle: You say that you intend to take additional steps but what are they? I would like you to give me a more specific answer. Is the problem that you do not know the answers and do not have the final reports about what happened in the US?

[English]

Mr. Robert Cadigan: As I said at the start, our area of expertise is the supply and service sector. Certainly we're not experts in terms of oil spill response or in the environmental issues. That's more the purview of the oil companies and the Government of Canada and other parties, but we have a regulator that has 20-odd years of experience. We've had the largest amount of activity in Canada in terms of exploration and production, and we have experience in terms of our regulator and their people. We can only look at the history and look at how things have worked over time.

I can't offer you any concrete new steps, but I think the additional oversight the Canada-Newfoundland Offshore Petroleum Board put in place, which includes a testing of equipment before entering hydrocarbon-bearing zones, is extremely prudent. It'll be interesting to see how the U.S. regulatory process in the gulf worked and how effective that oversight was.

● (1145)

[Translation]

Ms. Paule Brunelle: Thank you.

Good morning, Mr. Amos.

You stated that offshore drilling is a major environmental issue and I readily agree with you. Let us talk about "Old Harry". You probably know that Quebec has imposed a moratorium until 2012 on any exploration work in the Gulf of St. Lawrence, to allow for

strategic environmental studies to be done. Those are very fragile ecosystems, as you certainly know. The fishing industry is worried.

What do you think about this moratorium? Should the government of Newfoundland and Labrador do the same?

Mr. William Amos: This is a highly political question, obviously. It is made more complex by the fact that, so far, the jurisdiction over the Gulf of St. Lawrence is not quite clear. We are all waiting for information from the federal and Quebec governments about negotiations and requirements relating to the potential development of those resources. Our organization does not have any official position on the steps taken so far, but a moratorium in the Gulf of St. Lawrence does seem absolutely necessary. It is clear that we do not have enough scientific information about the potential impacts of drilling and spills, large or small. The affected communities have not all been consulted as they should have been. We should proceed slowly and democratically, and we should make sure that the regulation regime is well established and well understood by Canadians and Quebecers.

I would like to answer in part the question you put earlier to Mr. Cadigan. Whether as a Canadian or as an environmental legal advisor, his answer did not allay my concerns. As a Canadian, I need to know that concrete steps will be taken. The fact is that no serious concrete steps have yet been taken. Politicians and regulators keep telling us to wait for the reports, either from the National Energy Board or from the Canada-Newfoundland Offshore Petroleum Board. They say that we should wait for those reports to be received and analyzed, and to wait for the results of the National Energy Board review. They also say that we should wait for the results of the US presidential commission, and that it is only after having received all that that we should start discussing what should be done.

This does not indicate any great sense of caution. We are led to believe that everything is fine, that we should trust everyone, that things are moving forward and that the small problems will be resolved later. I do not think that is acceptable for Canadians and Quebecers. As a Quebec resident, I do not find that acceptable.

● (1150)

[English]

The Chair: Thank you, Mr. Amos.

Merci, Madame Brunelle.

We'll go now to Mr. Cullen for up to seven minutes. Go ahead, please.

Mr. Nathan Cullen: Thank you, Mr. Chair, and thank you to the witnesses.

We've talked about energy security very much around the safety component, but this study is also meant to talk about this as an economic component. We're looking at the energy security strategy for Canada right now. We know other energy-exporting countries develop an energy security strategy of some kind at a national level, preferably favouring the domestic economy in terms of investment and jobs created and whatnot.

Mr. Cadigan, do you know of any energy security strategy for Canada right now?

The Chair: Go ahead, Mr. Cadigan.

Mr. Robert Cadigan: That's not my area of expertise, but I think Canada's energy security is certainly enhanced when we have a clear picture of our reserves and our energy potential. How the Government of Canada matches that up with security is really up to the elected officials.

Mr. Nathan Cullen: If we had a strategy in place that said we want to determine the reserves that exist on the east coast or wherever, would that add a level of certainty to the oil and gas industry?

Mr. Robert Cadigan: Yes, it would add certainty in terms of the duration of the industry, in terms of the economic benefits and how long those are going to accrue, and in terms of the volume of production.

Mr. Nathan Cullen: I know you folks do a lot of the supply to the oil and gas sector. Are any of the companies in your association also involved in blowout prevention components, the safety pieces that seal the well in the moment of a blowout?

Mr. Robert Cadigan: Yes. In Atlantic Canada most of the contractors and suppliers of that kind of equipment are members of NOIA.

Mr. Nathan Cullen: The reason I ask is that I was curious. We had the Newfoundland board in front of us a couple of days ago. In the weeks that followed the incident in the gulf and up until today, there has not yet been a report as to what specifically went wrong. We know there was probably some human error or some mechanical error, but the Newfoundland board was confident to continue the Chevron well, which was much deeper and under different pressures, without knowing if there was a part that was used there that was also being used here and that may be faulty at depth or have some other problems.

Canada is a very small player to this point in the offshore oil and gas industry, as you pointed out. Since we don't know why the gulf happened the way it did, was there not at least some discussion among some of your industry members that for safety reasons on the rigs and for environmental reasons, a pause might be in order for that particular well until the U.S. could figure that out?

Mr. Robert Cadigan: From an overall perspective, in the Gulf of Mexico over 4,000 wells have been drilled in deep water. In the case of Newfoundland and Labrador, we did have a well planned and ready to proceed around the time of the Macondo incident. Some of the steps that our offshore petroleum board—our regulator—took in terms of the testing of equipment and the testing of procedures immediately before entering the hydrocarbon bearing zone, I think, were very effective ways to ensure that the equipment was working properly before the time of greatest risk.

Mr. Nathan Cullen: So from your members' perspective, there hadn't been a discussion of a pause.

I want to turn to Mr. Amos for a second. You'll be interested to hear that we had the head of the NEB in front of us the other day, and I think he confirmed what you said this morning about the review going on in the Arctic not being what the House of Commons passed unanimously as a motion to review unconventional sources, despite what the government says in question period and other places.

Why would it matter to Canada's overall economic, environmental, and cultural health if the government did initiate such a broad and full review of these unconventional sources—and within "unconventional", I also include Arctic drilling—which has not necessarily been done yet in Canada's experience? How would that aid us, and why must it be done now? Do other countries do it? Are we unique in this? Is it something we stand out on?

Mr. William Amos: There is certainly a major difference between what was suggested with that unanimous motion in terms of a review of unconventional oil sources and the current National Energy Board's review, which is much less comprehensive. If you're asking me to answer the question of what would be the ideal review for Canada, which I think is where you're heading with that question, I don't think the NEB review is ideal. I think it has scope issues. It's not dealing with the east coast, it's not dealing with the gulf, and it's not dealing with issues of leasing, which are within the purview of Indian and Northern Affairs.

It's not for me to say whether it would be appropriate to have a broad increase in scope that would include all sources of unconventional energy, because then you're getting into a lot of different energy forms, including shale and tar sands, or oil sands. That kind of review would be very broad in scope.

I think that what ought to be considered—and I take a cue here from Professor Ratushny of the University of Ottawa, who's an expert in commissions of inquiry—is a commission of inquiry that deals with offshore oil exploration and licensing across the country, whether in the Atlantic, the gulf, the Arctic, or the west coast.

• (1155)

Mr. Nathan Cullen: The leasing component is interesting, because north of 60 it is INAC issuing the leases and south of 60 it's Natural Resources Canada. In the Arctic in particular, we're trying to compare the leasing regimes between the U.S. and Canada and how vastly different they are. The government claims to have the toughest regime in the world, but even our immediate neighbours in the Arctic go through a very different process before any licences or leases are issued at all. If Canada issues the leases, do they not bind the company to drill as part of the contract? Is there not some sort of obligatory "we will drill" commitment prior to any of the environmental assessments?

I point out in particular that the Prime Minister announced a beluga refuge some time ago in the Arctic, not pointing out the fact that it's actually surrounded by oil and gas leases and that there are actually leases inside the refuge as well. It seems to the public.... How are you going to have a whale refuge in the midst of a bunch of oil platforms and wells with the potential to leak without having a recovery plan in place?

The leasing regime seems to be upside down in Canada. We commit to drill before we've actually done a comprehensive environmental assessment. Is that a component of a review that must be taken into account?

You said that the NEB is not reviewing the leasing in question right now in the Arctic. Is it correct that it's not within their scope of reference?

The Chair: You're going to have to give a 20-second answer. Mr. Cullen is well over his time.

Go ahead.

Mr. William Amos: Certainly.

In 20 seconds or less, the issue of leasing is critical to the issue of energy security in this country, and it's critical to the issue of offshore regulation. It's unfortunate that the National Energy Board hearing cannot and will not go into that issue, and it's unfortunate that there is no examination of offshore licensing in the gulf—or in the Atlantic, for that matter. What we have right now is a vacuum of public and governmental engagement on this issue. We need a broader review, and I think there is reason to believe that a joint commission of inquiry with provinces, offshore regulators, and the federal government involved would be a better approach.

The Chair: Thank you, Mr. Amos.

We'll go now to Mr. Allen for about five minutes, and then to Ms. Gallant for the last two minutes.

Mr. Mike Allen (Tobique—Mactaquac, CPC): Thank you, Chair.

Thank you to our witnesses for being here.

I have three questions. For the first one I want to pick up on the last comment.

Mr. Cadigan, Mr. Amos talked about a vacuum in the legislation and the oversight. Do you see the same thing?

Mr. Robert Cadigan: In terms of Newfoundland-Labrador, as an example, there was a strategic environmental review held in terms of the last licensing round for the offshore area of Labrador. That comprehensive review included community consultations, consultations with the Nunatsiavut government in northern Labrador, and consultations with many of the people in many communities in Labrador.

I think Mr. Amos probably needs to have a complete inventory of exactly what the procedures are with each of the regulators, and to have some of the history, but certainly in the case of that licensing round in Labrador, a comprehensive strategic environmental review was done in advance of any of the work. There was some seismic exploration work done this summer, and there will possibly be some more next summer. Whether there will drilling can't be determined at this point.

(1200)

Mr. Mike Allen: You talked about the coastal trading act and a little bit about the seismic vessels. I want to pick up where Mr. Andrews left off. You were talking about how, given the existing act, there were opportunities for frivolous complaints that might lead to delays in testing.

Could you briefly talk about any delays that have been experienced? As well, from your perspective, what specific suggestions would you make to change the act to regain balance?

Mr. Robert Cadigan: With regard to the coastal trading act—it's on the website as well—all of the approvals are given with rationale. The complainants are identified, and so on.

There was an example I used from this past summer. I'll give part two. Part one was that the primary operator in terms of the exploration program, which happened to be off the coast of Labrador, had received approval from the CTA. A second smaller and more junior company, which had an adjacent parcel of land and an adjacent licence, wanted to add onto that program, because this vessel would basically transit this other licence area. This particular company wanted to have this vessel do some seismic work on their adjacent parcel. Even though the original approval was given and rationales were given, there was a protest on that second parcel as well.

In general, most of the protests are made by one Canadian company, and generally they lose. Pretty well every time there's a seismic application offshore, they protest.

The solution, I believe, is a simple one, as we proposed earlier in the consultation round; it's to exempt seismic vessels from the act. Essentially that means that any foreign-flagged seismic vessel could come into Canadian waters to do work, and the issues would be around the business case and not around some of these, in our view, frivolous complaints.

Mr. Mike Allen: Thank you.

Just before I turn it over to Ms. Gallant, you talked about 4,500 people directly employed, and that's based on what's happening today. You talked about 60 trillion cubic feet of available resources. What do you believe that has contributed to the economic, social, and cultural well-being of the rural communities where these people live?

Mr. Robert Cadigan: In terms of Newfoundland and Labrador, about 30% of provincial revenue is derived from oil and gas royalties. We have a province that's really geographically dispersed; there are over 10,000 square kilometres in the island of Newfoundland alone. Supporting that population with health care and with infrastructure, such as roads and so on, is a very expensive proposition. That 30% of revenue is absolutely critical to the Newfoundland and Labrador business community, and I think to the population as a whole.

Mr. Mike Allen: Thank you.

I'll now turn over the rest of the time to Cheryl.

The Chair: Go ahead, Ms. Gallant.

Mrs. Cheryl Gallant (Renfrew—Nipissing—Pembroke, CPC): Thank you, Mr. Chairman.

Through you to Mr. Cadigan, it was mentioned that approximately 700 ships assisted in the BP oil spill cleanup. The issue of the CTA refusing to allow seismic vessels into Canadian waters was raised here today. If a spill were to occur in Canadian waters, could foreign ships sent to assist in the containment be denied entry under existing laws as well?

Mr. Robert Cadigan: I'm not an expert on marine law, but certainly if any foreign-flagged vessel has to pass through an approval process, then I don't see what would be different in an event such as the one you've spoken about. Obviously there would be ways to expedite that, but certainly the regulatory regime is in place, and it does require a review.

(1205)

Mrs. Cheryl Gallant: Thank you.

The Chair: Thank you very much, Mr. Allen and Ms. Gallant.

Thank you again to both of the witnesses for being here today. Your input is very much appreciated and very helpful.

I will suspend the meeting while we change witnesses. If the witnesses present in the room could back away from the table as quickly as possible so that the other witnesses could move up, that would give more time for questions after the comments in the next section

Thanks again. The meeting is suspended.

• _____(Pause) _____

The Chair: We'll resume the meeting now with our second group of witnesses

In our second pane we have, from the Department of Natural Resources, Mark Corey, assistant deputy minister, energy sector; Chantal Maheu, director general, energy policy branch; Eric Landry, director of the frontier lands management division, petroleum resources branch; and Jeff Labonté, director general, petroleum resources branch. Thank you all for being here.

We also have Earle McCurdy, president of the Fish, Food and Allied Workers. Welcome here.

Each group will have about seven minutes for a presentation. We'll start with Natural Resources Canada.

Go ahead, please, for up to seven minutes.

• (1210)

Mr. Mark Corey (Assistant Deputy Minister, Energy Sector, Department of Natural Resources): Thank you, Mr. Chair.

This is actually our second appearance before the committee. We were here last spring as well, talking about the offshore. We also appeared before the Senate committee.

It's obviously an area of considerable interest to members of Parliament. It's an area that's changing a lot right now, and it's a very important area for Canada's energy future.

[Translation]

We will make a very brief presentation during our 7 minutes. Our purpose is to give you an overview of the Canadian energy system, to review projections of oil and gas supply, to discuss federal responsibilities and to provide the current status of offshore oil and gas production in Canada. There are three different regions with different states of development.

Page 3 shows that Canada has abundant and varied energy sources, such as oil and gas, hydroelectricity, nuclear energy, natural gas and renewables. As a matter of fact, Canada is fifth in the world in total energy production, third in gas production, and seventh in oil production.

Canada's situation is unique in the world since we are the only OECD country with a growing oil production. We are also a net exporter of energy, as well as a major consumer.

[English]

The next couple of slides are projections of where energy production is going to be going.

The first one is from the International Energy Agency. It indicates that oil and gas will continue at the world level as a dominant energy resource for many years to come, so one of our basic planning assumptions is that it will remain a principal source of energy.

A number of recent findings in the International Energy Agency's global outlook from 2009 are worth noting. First, they project that global energy will increase at about 1.5% per year until 2030, which would be an overall increase of about 40%. Oil, gas, and coal are projected to remain the dominant source of primary energy worldwide, and unconventional oil will play a growing role in the world oil supply through to about 2035. Those are projections from the International Energy Agency.

Page 5 shows projections in Canada from the National Energy Board. They did the 2009 reference case. Their projection is that unconventional oil and gas are to become more important in our economy. Energy demand growth is expected to slow by 2020. Conventional production of oil is projected to continue its historic decline, but in their view this decline will be more than compensated for by an increase in non-conventional production, which is this committee's main interest in this particular review you're doing.

In eastern Canada the three major producing fields in offshore Newfoundland and Labrador are currently declining, but this decline will be moderated shortly by the addition of several satellite fields and by the addition of the larger Hebron field in 2017.

Slide 6 indicates the offshore industry is governed by a few key acts, notably two. The Canada Petroleum Resources Act provides federal authority to issue interests in crown frontier lands. It governs the leasing of federally owned oil and gas rights and allows for the protection of the environment. Subsurface rights in unexplored areas are issued in calls for bids, and the act governs the payment of royalties.

On the regulatory side, the Canada Oil and Gas Operations Act governs exploration for oil and gas and provides for safety, protection of the environment, conservation of oil and gas resources, joint production arrangements, and economically efficient infrastructure.

The content of slide 7 you know well, because you had the heads of the three boards before you earlier in the week. In Atlantic Canada we have taken an approach of shared management to the resource. Under the Canada-Newfoundland Atlantic Accord Implementation Act of 1987 and the Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act of 1988, we have a system of co-management with the provinces in those areas. The offshore boards are independent, arm's-length groups that are responsible for land tenure management functions, environmental protection, safety, and inspections. Natural Resources Canada is responsible for collecting, managing, and administering the royalties.

The National Energy Board is an independent federal regulatory agency, as you know, that administers the COGOA and regulates oil and gas activity in non-accord areas, including, for example, Canada's Arctic offshore.

Finally, Natural Resources Canada and INAC are responsible for collecting, managing, and administering royalties and land tenure management functions in Canada.

I won't spend a lot of time on slide 8. When we last appeared we were here with the Coast Guard and Environment Canada. I remember we had Indian and Northern Affairs Canada as well. We talked a lot about the various federal responsibilities. This slide is just a summary of what the various departments are responsible for.

On slide 9 we start to talk about the three specific areas in Canada.

In British Columbia there is a moratorium on offshore oil and gas exploration. This moratorium has been in effect for some decades now, and remains in effect.

In the north there are currently no authorizations for oil and gas drilling in the Beaufort Sea or elsewhere in Canada's Arctic waters. As you know, the NEB is undertaking a comprehensive review of Arctic safety and environmental offshore drilling requirements. On June 10 it undertook a preliminary scoping exercise and on September 20 released details on the offshore drilling review, which will address safety while protecting the environment, responding when things go wrong, what they've learned, and what their filing requirements will be. The review will be conducted in three phases, and we expect it will probably be completed sometime next year.

The last area is Atlantic Canada. There has been offshore activity since the early 1980s. As you can see, it has brought important economic benefits to the region. For example, in 2009-2010, transfer payments alone to Newfoundland and Labrador were \$1.2 billion, while \$109 million went to Nova Scotia. This creates a lot of jobs, and there are a lot of other economic spinoffs and benefits to both the region and to Canada as well.

Several regulatory actions were taken recently, as you know, which included measures additional to the regulatory oversight requirements already in place for Chevron's drilling project in the Orphan Basin, which was safely completed in August of 2010.

• (1215)

As you know, an independent assessment of offshore oil spill prevention and response for offshore Newfoundland and Labrador is currently being conducted. The moratorium on oil and gas activities in Georges Bank was extended to December 31, 2015. That

happened recently, and recently there's been interest in oil and gas potential in the Gulf of St. Lawrence, both from Quebec and from Newfoundland and Labrador.

In summary, to lay out the basics of the offshore situation, Canada's oil needs are met by a diverse energy mix. Specifically oil and gas will continue to dominate energy supply, and unconventional oil and gas will increase in importance over the next few decades. Canada's offshore oil and gas activity is governed by federal legislation and regulations, which are co-managed with the provinces in accord areas. Currently, there's no offshore drilling in B. C., the north, or in the Gulf of St. Lawrence, and there has been offshore activity in both Newfoundland and Labrador and Nova Scotia since the 1980s.

The Chair: Thank you very much for a very concise overview, Mr. Corey, and you were on time, which I appreciate. Thank you.

We go now to Mr. Earle McCurdy, president of the Fish, Food and Allied Workers union.

Welcome to the committee. Please go ahead with your presentation. You have up to seven minutes.

Mr. Earle McCurdy (President, Fish, Food and Allied Workers): Thank you. I'm pleased to have the opportunity to be here.

It's great to be from a "have" province where some of us are still trying to figure out what exactly it is that we have. In the metropolitan area of St. John's, I think that's probably fairly obvious. The economy there is doing well, and obviously the oil and gas activity is the driving force behind that.

When you get into the rural areas of the province, where most of our members are located, it's not so obvious that we're doing well. In fact, the economy is in tough shape.

Nobody really told me, so I was trying to figure out what I would have to offer this particular committee. I assumed it would relate to the impacts on the fishing industry, so that's the area I've chosen to focus on.

Oil and gas means a lot of things to a lot of people. To people in the real estate business, or suppliers, or a whole host of people, it means major economic opportunity and growth. For people in the fishery, it primarily means risk. They're the ones in the line of fire.

If you look at the *Exxon Valdez* disaster in Alaska, the *Prestige* disaster in Spain, and most recently the Gulf of Mexico catastrophe, people who make their living from the fishery were the ones in the line of fire and who felt the most immediate impact.

As the mayor of a small town in southern Louisiana put it to us a few days ago, "April 20 changed our lives". It's very serious to people.

In Norway there's been a conscious policy that some of the proceeds of oil and gas development, which is a non-renewable resource, would be used to strengthen and stabilize traditional renewable industries. If there is such a policy in Canada, I'm not aware of it. I think there should be.

We recognize the impact of oil and gas on our economy, and we have done our best to work with the oil and gas sector in terms of trying to coexist, to the point that we formed a liaison organization with them called One Ocean, which meets periodically. It has a board of directors consisting of equal representation of oil industry and fishing industry representatives, including me.

Two weeks ago we had a delegation from One Ocean, including me, go to the gulf states for a week to meet people who could speak with some knowledge and experience on the impacts of the disaster there. I can give you a quick sketch of what transpired.

There were three people from our union, two from the oil industry, and a staff person from One Ocean. We met with fishermen, fish processors, marketing organizations, mayors, parish council members, the Governor's director of coastal management, the response contractor who was brought in to coordinate vessels of opportunity, and oil and gas industry associations. We had a half day at the end at the BP command centre to hear their views of what transpired and how they responded.

We had a pretty hectic schedule while we were there, but there are a few main take-aways we got from that, if I could touch on them.

People in the communities and people involved in the fishery thought there was something in place to deal with these kinds of eventualities. They were just as surprised and horrified as our members were that there didn't seem to be a capability to handle the problem that arose.

Dispersant use was a very contentious issue—and contagious, too, I think. Market tainting—i.e., the perception of a problem—became a problem in itself. Probably the most tested seafood in the world is down in the gulf. I ate the stuff without any hesitation, but tell it to the judge. I think a University of Minnesota survey showed that 44% of the American population wouldn't eat gulf seafood because they were fearful of the consequences. That's a major consideration.

The other thing that came back to us over and over again was the importance of having a plan in advance. We talked to a man who lives in Seattle. He works for a Finnish firm, and he had experience as the coordinator of the vessels of opportunity response to the *Exxon Valdez* in Alaska. He was brought into the Gulf of Mexico to do the same job.

● (1220)

He said he started with a blank sheet of paper. He didn't know who the fishermen were, he didn't know who owned vessels that could be used, he didn't know the characteristics, and he didn't have a plan. He had to start from absolute scratch. He said it would be so much better to have this done ahead, in what he called "peacetime", when there was less stress and more ability to have a plan for these things. A lack of such a plan, in his view, made his job much tougher.

Bland assurances really don't do a whole lot for us. I think they had those kinds of bland assurances down there. When you stop to think about it, once this blowout occurred, what they had to do to fix it was to accurately hit an eight and a half inch hole three and a half miles down in the ocean. When I was a kid, at the regatta—that's our kind of garden party—they had an annual fair where there was a game with a bucket of water and a little cup in the bucket, and if you flicked your quarter and made it land in the cup, you got a dollar

back. I tried it only enough times to realize it was a sucker's game and that you weren't going to get your money back, so I used my quarter on cotton candy or something else. So that was a challenging job they had to get at that hole.

One thing that was very clear to us down there, which we got from the people we visited, was that since the *Exxon Valdez* disaster, which I believe was in 1978, they've had virtually no R and D done on boom technology, skimming technology, and so on. All of the R and D went into drilling and development, and not into that kind of remedial action. I think that's clearly an area that needs attention.

As a final note, though I'm not very knowledgeable about energy security, I would certainly hope that our environmental security would not be sacrificed on the altar of energy security. We have renewable industries that depend on that ocean, and I think there's a responsibility on the part of legislators and regulators to do everything that's reasonably possible to protect those industries in the first place and to have a contingency plan in place in the event that something goes awry.

Thank you.

• (1225)

The Chair: Thank you very much, Mr. McCurdy.

We'll now go directly to questions, starting with Mr. Tonks, and if there's time left, we'll go to Mr. Andrews.

Go ahead, please, Mr. Tonks, for up to seven minutes.

Mr. Alan Tonks (York South—Weston, Lib.): Thank you, Mr. Chairman

Thank you to all of our witnesses.

I would like to continue the questioning with respect to what we heard from the last witness deputations on the state of the National Energy Board's review with respect to legislation and emergency response. I'm particularly compelled to do that, as Mr. McCurdy has referred to that culture of complacency and has talked about the integration of the environment as everyone's concern. He also said that there should be a plan in advance.

My question is related to the testimony that we heard from the National Energy Board. Mr. Caron said this:

A critical requirement for offshore drilling, which is set out in section 6 of the Canada oil and gas drilling and production regulations, is the need for companies to provide an emergency response plan, which is reviewed in detail by the NEB before any drilling authorization may be issued. If there are gaps

—and I stress this—

in the plan, the company would have to address these gaps before the board would consider permitting the drilling to occur.

Then he went on to say:

The new U.S. regulations also call for industry to develop an integrated safety and environmental management system. Canada's regulations already require operators to have safety and environmental management systems. In other words, the United States is moving towards where Canada has been.

We heard testimony from the last witness, Mr. Amos from Ecojustice, that they were doing a gap analysis in the United States. According to the testimony of the NEB, they're quite satisfied that they have already done the gap analysis in terms of response.

My question is perhaps to you, Mr. Corey. Are you satisfied with the position taken by the National Energy Board? Are officials from Natural Resources monitoring the review that's taking place in terms of where those gaps are, as indicated by witness testimony, and is the legislation being adjusted accordingly? Are we monitoring those hearings and are we going to have follow-up in terms of this committee's role, or any committee's role, in closing the accountability loop?

The Chair: Go ahead, Mr. Corey.

Mr. Mark Corey: Thank you, Mr. Chair.

I'll start off and then I will pass it over to Jeff Labonté, who is the director general of the petroleum resources branch, who can talk to it in more detail.

The answer is yes. We are actually participating in the NEB review, and we're going to be watching it very closely. We'll be working with them. In Mr. Caron's testimony to you earlier, he made it clear that they will make recommendations on regulations that need to be changed. Then it's the department's role to work with them and to advise the minister, because eventually it's the minister who makes recommendations for the order in council that would change the regulations.

So the answer is yes, we will be working with them and watching closely, but we always underline that they are an independent arm's-length regulator, and we are just one participant with them.

Jeff, did you want to add a bit to that?

Mr. Jeff Labonté (Director General, Petroleum Resources Branch, Department of Natural Resources): Yes. Thank you very much for the question.

As Mark has indicated, NRCan is a participant in the NEB review, and of course we're watching actively as it gets under way.

In terms of the comment about safety measures that exist for emergency preparedness and offshore drilling, in Canada at this point each of the arm's-length regulators has a requirement that obligates operators to put in place a number of measures in advance of moving forward. Those measures have to be put in place and approved by the regulator before operators can receive an authorization to move forward with any drilling activity.

Those measures include a safety plan, an environmental protection plan, an emergency response plan, and a contingency plan. Each of those aspects is documented in great detail and to the satisfaction of the regulator before they can go forward.

Canada's structure around the safety measures is an important foundation for the work the regulators do, and it is done in advance of providing authorizations to companies.

● (1230)

Mr. Alan Tonks: My hope was that it wouldn't be just the United States with respect to gaps that occurred, and that we would be looking much further than that. I was a little concerned with respect to the inference that was drawn, the inference that we're way ahead of that. I think we should be very careful on that.

I'll pass it over, if there's any time.

The Chair: You have about two minutes, Mr. Andrews.

Mr. Scott Andrews: Thank you very much, Mr. Chair.

I have two questions for you, Mr. McCurdy.

First, when it comes to seismic testing and the impact on the fishery—the groundfish stocks and the shellfish—has any research been done that impact? Is seismic testing on the ocean floor a concern of yours or of your organization?

Second, has your organization ever objected to any offshore oil and development testing or drilling in the last few years?

Mr. Earle McCurdy: On the seismic issue, I think the unknown with that issue is the long-term impact. I'm not an expert in the area by a long shot, but intuitively, I don't think it's a great thing for the species that live there.

It's a bit like having a jackhammer in your kitchen when you're trying to cook supper. It really is intrusive, and who knows what impact that might have on reproduction? I don't know—

Mr. Scott Andrews: So there has been no research done that you know of?

Mr. Earle McCurdy: I can't say there's been no research done. I'm not an expert on any research that has been done. Some degree of immediate dispersal of fish has been shown, but then over a relatively short period of time that impact seems to have diminished.

I'm not aware of any research that has looked at the long-term implications in terms of the impact on reproduction, migration, spawning behaviour, and that kind of thing. It has been a source of concern for some time.

On the issue of input on various developments, we haven't opposed offshore oil development taking place because, first of all, we feel it wouldn't be very productive in the sense that it wouldn't have any outcome to it, and it is an important industry for our economy. However, we're not satisfied it's being done in a manner that fully mitigates the impacts on the fishery or anticipates them and deals with them to the extent it should.

We've also been successful in having some adjustment to things such as the timing of particular activities—for example, seismic work—in relation to the timing of the fishing season or spawning behaviour. We have made representations and have had seismic activity delayed to avoid adverse impacts to the extent possible.

Mr. Scott Andrews: So you've had a cooperative relationship?

Mr. Earle McCurdy: We try to work with the oil industry on the basis that we understand they're there trying to make a living in the same ocean, but we expect them to understand we've been there for a long time and that their activities shouldn't undermine our industry.

The Chair: Thank you, Mr. Andrews. Your time is up.

We go now to the Bloc Québécois. Monsieur Pomerleau, you have up to seven minutes.

[Translation]

Mr. Roger Pomerleau (Drummond, BQ): Thank you very much, Mr. Chair.

I want to thank the witnesses for being here.

As you may have seen from our questions to the previous witnesses—and this has been raised many times in the past—people are generally not reassured by the present situation. It may be why Americans refuse to eat fish from the Gulf of Mexico. We really need a better and transparent regulation regime. People have to be informed about the regulations, which they do not seem to be at this time. At the very least, people do not feel that they have enough information.

I would like to have your opinion about this. I would like you to tell us what is being done, at this time, for people to feel safer.

• (1235)

Mr. Mark Corey: Mr. Chair, I will start answering the question and then ask Eric Landry, our director for this area, to complete my answer.

This is one of our concerns, especially since the events of last April in the Gulf. It is something that we are reviewing. If I remember correctly, another minister who was part of the Committee of the whole said that we would draw lessons from what happened in the Gulf. I can assure you that we are looking very closely at the reports on these events to see what can be learned from that.

Do you want to add something, Mr. Landry?

Mr. Eric Landry (Director, Frontier Lands Management Division, Petroleum Resources Branch, Department of Natural Resources): I would like to clarify a few things. Authorizing the various activities is the responsibility of the offshore Boards or of the NEB. Environmental assessments have to be carried out before work can proceed. They also have to be done by the private sector. Typically, they include public consultations.

In the case of the Boards, they publish documents so that people can participate and submit their comments about the various projects that have been proposed.

Mr. Roger Pomerleau: I have the feeling that it is what is being done at this time but that does not make people feel any safer. That is my point.

What does the NEB intend to do about the changes made to the regulations? Is it going to monitor what is going to happen, so that people feel the problem has been resolved? We all know that there will always be some risk but it has to be minimized as much as possible. People want to know that all the steps have been taken to solve this problem.

Mr. Eric Landry: As Mr. Corey mentioned, we are closely monitoring the review. My people will be involved in the Arctic review. My group is also following the various studies and reviews currently undertaken in the US in order to see what can be learned to improve the regulations and, later, to provide advice to our officials and to the Minister about...

Mr. Roger Pomerleau: When will the reports be published in the US?

Mr. Eric Landry: The various reports have different timetables but are not expected before the end of the year. The report of the commission

Mr. Roger Pomerleau: You mean the end of 2010?

Mr. Mark Corev: Yes.

Mr. Roger Pomerleau: I have another question.

Someone mentioned earlier, quite accurately, that emergency plans should be prepared in peacetime. Someone else had indicated previously that it would appear that no competent people are looking at the issue of Arctic drilling at this time. We are in peacetime and there is no drilling going on, so that would be the right time to plan for emergencies. However, it seems that nobody is doing so.

Is that true? What do you intend to do about it?

Mr. Mark Corey: I will answer part of the question. That is really the purpose of the National Energy Board review. We need more information about safety and environmental issues. We all know that the Arctic environment is very fragile, or at least more so than in other parts of Canada. That is a good question. It is something that we are currently looking at. We have lots of information but we need more.

Do you want to add something, Mr. Labonté?

[English]

The Chair: Go ahead, Monsieur Labonté.

Mr. Jeff Labonté: Thank you.

Certainly there's an expectation that the findings in the NEB hearings, as well as a number of the persons and groups seeking status, will address that issue. As you probably heard from Gaétan Caron earlier in the week, there are four areas. One of those is how to respond when things go wrong. That would present a number of different approaches and methods and levels of understanding of the competence for how a response might occur should something go wrong.

At this point in time I think it's fair to say this is an active area of discussion, debate, and interest, and I'm looking forward to some of those findings and information.

[Translation]

Mr. Roger Pomerleau: Do I have enough time for another question, Mr. Benoit?

The Chair: Yes.

Mr. Roger Pomerleau: All right. My question is for you, Mr. McCurdy. I really appreciated your presentation, especially the way you expressed your thinking. At the end— and this was a good summary of your position, which I share— you stated that environmental safety should not be sacrificed on the altar of energy security. I believe this is an excellent summary of the issue and of the way we should look for a solution.

You know that the government of Quebec has imposed a multiyear moratorium on "Old Harry" to make sure that the possible impacts of drilling in that area be fully studied, since this is not an offshore area. It is a completely different environment. For example, we know that in case of a spill, oil would not be dispersed as easily as in the ocean and that it would stay there for quite some time. We also know that the marine wildlife is not the same as in the ocean. It may be more concentrated and more complex. I believe the government acted wisely in imposing a moratorium to have enough time to study closely the potential impacts, especially for the people of the Magdalen Islands.

What do you think of this moratorium? Do you think it is wise to take a bit more time to study the potential impacts?

• (1240)

[English]

The Chair: Could I get a fairly brief response, please?

Mr. Earle McCurdy: It's hard to fix it once the problem has happened. If there's a lesson out of the gulf.... The CEO of Exxon told the congressional committee they weren't prepared for that event, and if you're not prepared for an event, the development shouldn't take place beforehand. To wait and to be reasonably assured of what the consequences will be seems prudent to me.

The Chair: Thank you very much. Merci, Monsieur Pomerleau.

We go now to Mr. Cullen. You have up to seven minutes, please.

Mr. Nathan Cullen: Thank you, everyone, for being here.

Mr. Corey, under the government's definition of energy security, are renewables considered part of that package?

Mr. Mark Corey: Mr. Chair, that is an important part of our overall energy strategy. When you look at the approach the government has had to energy development, energy supply, and energy policy, renewables play an important role. I don't have the numbers here, but the government has put billions of dollars into the renewables sector over the past number of years in all areas—wind, solar....

Mr. Nathan Cullen: I have a quick question on that. Do you consider carbon capture a renewable? Does the government classify it as renewable?

Mr. Mark Corey: Technically, I'd have to look into that-

Mr. Nathan Cullen: Do you mind? I've been curious about it for some time.

Mr. Mark Corey: Okay.

Mr. Nathan Cullen: With regard to the NEB review that's going on right now, are you familiar with the motion that was passed in the House of Commons this past spring?

Mr. Mark Corey: Yes.

Mr. Nathan Cullen: It was for the government to conduct...a thorough review and revision of all relevant federal laws, regulations and policies regarding the development of unconventional sources of oil and gas....

And it goes on. You're familiar with this. Is the NEB doing that review right now?

Mr. Mark Corey: Mr. Chair, I'll ask Mr. Labonté to answer that. **The Chair:** Go ahead, please, Mr. Labonté.

Mr. Jeff Labonté: Thank you for the question.

I think it's fair to say that NRCan is committed to responsible, safe, and sustainable development of natural resources.

The context for the policy environment around this particular motion and element certainly has a lot of different considerations and circumstances. It's a fairly complicated area, with quite a few different aspects, and it certainly needs to take into account regional issues; issues about the environment issues of the north, the east coast, and the west coast; and certainly recognition of, and respect for, provincial jurisdiction with respect to the development of natural resources.

Mr. Nathan Cullen: Am I to take it from your answer that you're doing that review?

Mr. Jeff Labonté: I think it's fair to say a number of different elements and aspects of different reviews going on around the country address a number of important points. The NEB is looking at the review of the Arctic offshore drilling. You heard earlier that Newfoundland and Labrador are doing a response and a review of offshore drilling on the east coast—

Mr. Nathan Cullen: Mr. Labonté, it was a very direct question, a very simple one. Is the NEB doing that review right now? I know about these other reviews. The committee is familiar with them.

Are you doing that review?

Mr. Jeff Labonté: Mr. Chair, to return to the point, it's a fairly complicated area. There are a number of different aspects to the policy environment, and certainly there are a number of different reviews under way throughout the country, all interested in the same aspect, which is to ensure that we have a robust regulatory regime that can provide safe, responsible, and sustainable development of natural resources.

Mr. Nathan Cullen: When questioned about this in the House, the minister said that in response to the motion passed unanimously by the House of Commons, the NEB is doing this review. I've asked you three times now if the NEB is doing this review. The answer from the NEB is no. We asked them very explicitly.

It's just yes or no. I understand there are other reviews going on. Is Natural Resources Canada doing a broad review? You can say yes or no—it's okay—but don't tell me about all the other reviews. I just want to know if you guys are doing it. That's all I'm asking. It's very simple.

• (1245)

Mr. Jeff Labonté: I think if you look at all the policy aspects related to the motion, there are quite a few different elements and areas related to this. They involve a lot of complexity. They involve a lot of federal-provincial jurisdiction. They involve regional variations, environmental circumstances, and circumstances that are different in a very diverse country.

Looking at a number of the different elements, they certainly address, in terms of a number of reviews.... There are, I think, over about 10 or 12 going on throughout the country.

Mr. Nathan Cullen: Just to be clear, the Minister of Natural Resources, when asked about this specific question in the House of Commons, said that the NEB is doing it. The NEB is not doing it.

I can't get an explicit answer from Natural Resources officials today, which is disappointing. It's perfectly fine to say no. We're just trying to find this out.

I have a question for you, Mr. Corey, about leases in the Arctic. As part of the lease, is the company committed to drill? Is it not part of their contract to make a commitment to actually perform some exploratory drilling when they acquire a lease?

Mr. Mark Corey: The answer is yes.

Mr. Nathan Cullen: Okay. That's great. Thank you. That's so relieving.

There's no drilling going on right now, but we expect drilling in the next few years, according to the leases that have already been commissioned by the government.

Mr. Mark Corey: That's correct, and it's INAC that is responsible for the leases. They're the ones who administer it in the north.

Mr. Nathan Cullen: You mentioned a moratorium on the west coast. For a number of years, different parties have tried to actually see how that moratorium is written. Do you have a copy of it? Does it exist?

I apologize. I don't know what's causing that feedback noise, Chair.

The Chair: It's your magnetic personality.

Mr. Nathan Cullen: Is that what it is? I'm hot and bothered, that's why.

Voices: Oh, oh!

Mr. Nathan Cullen: I've got the mikes fired up.

The Chair: Anyway, please continue.

Mr. Nathan Cullen: Oh, it's the government tap coming in. I'm sorry; we're getting feedback.

The Chair: Please continue, Mr. Cullen.

Mr. Nathan Cullen: Specifically, is there a moratorium written down anywhere? We know the government issued a verbal statement about it back in the 1970s, but we have not been able to actually see a written document anywhere. The provincial government in B.C. actually says that there isn't one, which has created a bit of confusion, as you can well understand.

Mr. Mark Corey: Mr. Chair, the answer to that is that there is a moratorium in place. The moratorium continues to be maintained through government policy. No activity can occur until the government decides otherwise. It is in place, and there is a policy that says that it shall not occur.

Mr. Nathan Cullen: Mr. McCurdy, you commented about environmental security being sacrificed on the altar of energy security. There are actually many countries, Norway being one of them, that include environmental security inside energy security. It should be one and the same. One shouldn't be versus the other. I took your point very well.

On the west coast the place that I represent, which might be quite similar to yours, has a \$140 million wild salmon industry. There have been proposals to lift the moratorium on the west coast, as Mr. Corey knows, but the risk is being incurred by the fishing community entirely, with virtually no benefit to them—unless there's a spill; then their boats get hired out, I suppose.

Does it sometimes feel in your situation that oil and gas are the big kid on the block politically and economically, and that you folks have been pushed down to the side and virtually off the table in trying to get the interests of the fishing community put forward in these decisions?

Mr. Earle McCurdy: Let me put it this way. I don't think that the extent of the risk taken on by the people who work in the fishing industry as a result of the arrival of the oil and gas industry has been recognized or dealt with, and there is a great deal of risk.

In our province, our fishery is roughly a billion-dollar export industry annually. That is small potatoes compared to the oil and gas industry, but it's sure big potatoes in terms of rural Newfoundland—a province of a half million people—for the rural population and for the ability to maintain rural communities.

We are concerned about the impacts it has and we don't believe there has been adequate.... We're not satisfied with the extent to which that's been recognized and dealt with. Normally when you ask somebody to take a risk, you say that in return for that risk, you're going to provide them with some kind of quid pro quo. That's what has been lacking.

The Chair: Thank you, Mr. Cullen. Your time is up.

We go now to Mr. Harris. You have up to seven minutes. Go ahead, please.

Mr. Richard Harris (Cariboo—Prince George, CPC): Thank you, Mr. Chairman.

Mr. Labonté, I'm aware that a number of different reviews are going on at the present time. They have been going on probably even more vigorously since the gulf spill. We're all looking for the same things. I'm not sure of the number of reviews, but I know that it's more than one. There are probably three or four different ones.

Is it fair to say that by virtue of the scope of the responsibility and oversight that the NEB has, no matter who is doing these reviews in Canada, you guys are automatically involved? With the sharing and receiving of information, you certainly have a.... There must be an extension there because of your oversight, a passing of information as a result of the findings and things like that.

Is that a fair comment?

(1250)

Mr. Jeff Labonté: I think it's a completely fair comment. Natural Resources Canada works closely with, and sets the regulatory framework for, the NEB and the offshore boards, in partnership with Newfoundland and Labrador and the Province of Nova Scotia. Certainly aspects of the motion are covered in the NEB review, but there are a number of other reviews under way. There is the Newfoundland review.

We're certainly monitoring all the reviews, including the ones that are happening outside of Canada. In the United States, there are two or three different reviews under way. The United Kingdom is doing a review. Australia is doing a review. There are a whole number of different aspects being looked at, whether they're focused on the technological aspects, the regulatory aspects, or the safety response.

The sum of all of these reviews is an important factor that helps us monitor and understand what gaps exist or what opportunities there might be for Canada to look at its regime.

Mr. Richard Harris: Yes, I would suggest that given the scope of the NEB's responsibility, you're pretty much automatically drawn into, in some way, every review that goes on within the area of your responsibility.

Mr. Jeff Labonté: Indeed.

Mr. Richard Harris: We're all laymen at this table, with the exception of you guys, and we're learning about oil spills from the witnesses and from reading what we can about them.

I need to ask a couple of basic questions. Has there ever been an offshore spill in Canada, and if so, when was the last one that resulted from a blowout or an equipment failure?

Mr. Mark Corey: The answer is yes. I think that was about the first question we answered when we were before the committee last spring. There were two, both involving gas off the east coast of Atlantic Canada.

Jeff, do you have the details?

Mr. Richard Harris: When was that?

Mr. Jeff Labonté: There was one in the early 1980s on the east coast of Canada, in Nova Scotia, and there was a second one in the same period, more or less, both of which were contained.

Mr. Richard Harris: All right.

In the area of preventing a spill or a leakage or blowout, I'm hearing the following three things from the witnesses we've heard.

First, the way to prevent a spill is by increasing the scientific and technical knowledge about how you drill and about what's down there and about how you safely go through the different zones. That would be number one.

The second way is to eliminate the chance of human error, to the highest possible extent, through increased training and safety methods.

The third is to research and develop newer and safer equipment to eliminate the incidence or chance of equipment failure to the highest extent possible.

That's what I am getting on the side of preventing a possible blowout.

What I'm getting in the event of a spill is again the importance of increasing scientific knowledge. You need to be able to deal with the oil in the water and know how to disperse it, and you need to know the technical aspects of how to gather it up and contain it. As well, you need an advance containment remediation plan. Third, you need

to have the logistics and the infrastructure to carry out the physical part of cleaning up an accident.

Those things appear to me to be ongoing work. We're always looking to increase our scientific and technical knowledge to find safer ways of doing things and to decrease the chance of human error and equipment failure. Then there's the clean-up side.

Is it fair to say that we have reasons to have all of those as ongoing areas in trying to improve or minimize the chances of a spill?

That's a long question. I'm sorry.

• (1254

Mr. Mark Corey: Mr. Chair, I think that's a fairly good summary of a lot of the problems we've seen.

One of the things that we have seen so far coming out of the situation in the Gulf of Mexico is the first report that BP has issued. The department actually had folks from BP come to the department and brief us. In their report—and again, it's BP's view—they list eight things that happened, and a lot of them pertain to things that you were talking about. There was equipment failure. There were people who did not understand what was happening and what the various readings meant. There were instances in which they just missed things. There was a sequence, in their view, of eight things that happened that would be addressed by a number of the things you've mentioned.

What we're really waiting for is the presidential commission report that will be coming, I believe, in the next month or two months, possibly in January. A number of other reports are ongoing, and you can be certain that all three boards and the Government of Canada will be watching those very closely to see what lessons we can learn.

The other thing I would mention is that we're not alone in this. There's the International Regulators' Forum. The three boards that you had before you earlier belong to this larger international community. They spend a lot of time talking about new trends and regulations, how to regulate better, and how to address a number of the points you've raised. I think it's fair to say that a lot will be happening in that forum as the regulators take stock of what we've learned about how to prevent things like this in the future.

Mr. Richard Harris: Right. Thank you very much.

Do I have any time left?

The Chair: You do not, Mr. Harris.

Thank you very much.

We thank all of the witnesses very much for coming and helping with this study.

I want to wish all of the members of the committee a good constituency work week. In particular, our Remembrance Day ceremonies are very important to everyone. I wish you all the best.

We will see you on Tuesday, November 16.

The meeting is adjourned.



Canada Post Corporation / Société canadienne des postes

Postage paid

Port payé

Lettermail

Poste-lettre

1782711 Ottawa

If undelivered, return COVER ONLY to: Publishing and Depository Services Public Works and Government Services Canada Ottawa, Ontario K1A 0S5

En cas de non-livraison, retourner cette COUVERTURE SEULEMENT à : Les Éditions et Services de dépôt Travaux publics et Services gouvernementaux Canada Ottawa (Ontario) K1A 0S5

Published under the authority of the Speaker of the House of Commons

SPEAKER'S PERMISSION

Reproduction of the proceedings of the House of Commons and its Committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the *Copyright Act*. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a Committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the *Copyright Act*.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its Committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

Additional copies may be obtained from: Publishing and Depository Services
Public Works and Government Services Canada Ottawa, Ontario K1A 0S5
Telephone: 613-941-5995 or 1-800-635-7943
Fax: 613-954-5779 or 1-800-565-7757
publications@tpsgc-pwgsc.gc.ca
http://publications.gc.ca

Also available on the Parliament of Canada Web Site at the following address: http://www.parl.gc.ca

Publié en conformité de l'autorité du Président de la Chambre des communes

PERMISSION DU PRÉSIDENT

Il est permis de reproduire les délibérations de la Chambre et de ses comités, en tout ou en partie, sur n'importe quel support, pourvu que la reproduction soit exacte et qu'elle ne soit pas présentée comme version officielle. Il n'est toutefois pas permis de reproduire, de distribuer ou d'utiliser les délibérations à des fins commerciales visant la réalisation d'un profit financier. Toute reproduction ou utilisation non permise ou non formellement autorisée peut être considérée comme une violation du droit d'auteur aux termes de la *Loi sur le droit d'auteur*. Une autorisation formelle peut être obtenue sur présentation d'une demande écrite au Bureau du Président de la Chambre.

La reproduction conforme à la présente permission ne constitue pas une publication sous l'autorité de la Chambre. Le privilège absolu qui s'applique aux délibérations de la Chambre ne s'étend pas aux reproductions permises. Lorsqu'une reproduction comprend des mémoires présentés à un comité de la Chambre, il peut être nécessaire d'obtenir de leurs auteurs l'autorisation de les reproduire, conformément à la Loi sur le droit d'auteur.

La présente permission ne porte pas atteinte aux privilèges, pouvoirs, immunités et droits de la Chambre et de ses comités. Il est entendu que cette permission ne touche pas l'interdiction de contester ou de mettre en cause les délibérations de la Chambre devant les tribunaux ou autrement. La Chambre conserve le droit et le privilège de déclarer l'utilisateur coupable d'outrage au Parlement lorsque la reproduction ou l'utilisation n'est pas conforme à la présente permission.

On peut obtenir des copies supplémentaires en écrivant à : Les Éditions et Services de dépôt

Travaux publics et Services gouvernementaux Canada Ottawa (Ontario) K1A 0S5 Téléphone : 613-941-5995 ou 1-800-635-7943

Télécopieur : 613-954-5779 ou 1-800-565-7757 publications@tpsgc-pwgsc.gc.ca http://publications.gc.ca

Aussi disponible sur le site Web du Parlement du Canada à l'adresse suivante : http://www.parl.gc.ca