

THE STANDING SENATE COMMITTEE ON ENERGY, THE ENVIRONMENT
AND NATURAL RESOURCES
EVIDENCE

OTTAWA, Thursday, June 3, 2010

The Standing Senate Committee on Energy, the Environment and Natural Resources met this day at 8 a.m. to study the current state and future of Canada's energy sector (including alternative energy). (Topic: Canadian offshore oil/gas exploration and drilling: the current status of operations/applicable regulatory rules and regulations.); and for the consideration of a draft budget.

Senator W. David Angus (*Chair*) in the chair.

The Chair: I am calling to order this meeting of the Standing Senate Committee on Energy, the Environment and Natural Resources. I welcome Mr. Craig Stewart, our witness this morning. I welcome people in the room and people tuning in on the CPAC network and also on the worldwide web.

This is a special hearing, in a sense, of our committee, all within the context of the study we are doing on the energy sector, with a view to developing a framework for future strategy and policy in that area because of the horrendous events that have been taking place in the Gulf of Mexico. I think it is Day 45 since the terrible accident with the Deepwater Horizon occurred. There has been considerable anxiety building up amongst the Canadian populace as to the state of play here in our country and if there is a possibility for us to have such a terrible disaster occur off our shores at this time. We decided to hold these particular hearings simply as a fact-finding mission in order to educate and inform Canadians whether there is drilling and exploration ongoing off Canada's one or more of its three oceans: The West Coast, the Arctic and the Atlantic. If so, how much, to what extent and what oversight and regulations are in place to govern same.

We have learned so far that there is no drilling ongoing at the moment on the West Coast nor in the Arctic. There are plans in these areas, but there is quite a bit of activity on the East Coast. Our goal is to get the story out and hopefully to allay the fears of those people who have indicated in public opinion polls that they would like to have an immediate moratorium on all drilling and exploration of gas and oil, which is actually quite a significant part of the Canadian economy. If it is not necessary to have a moratorium, we need to know why and make Canadian people understand what is actually happening. That is why we are here.

We are blessed this morning to have Mr. Craig Stewart, Director of the Ottawa bureau of the Arctic Program of World Wildlife Canada, WWF. Mr. Stewart has already shared his knowledge with the House of Commons committee that is looking into offshore drilling matters. He and I have also had a discussion. He understands the scope of our mandate in that we are not interested in getting into "what if" or what policy should be, rather what the facts are today so people can understand and make their own decisions as to whether we have a problem off the Atlantic coast or not, inasmuch as we have learned there is no drilling ongoing on the West Coast or the Arctic at this time.

Mr. Stewart has held his position with World Wildlife since February of 2008. He has special fields of expertise in innovative, international and domestic policy development and implementation; strategic solutions-based advocacy; public affairs analysis; constituency building through partnerships; crisis management; policy writing; editing and public speaking; mountain guiding and interpretive activities. I do not know when you get a chance to eat or socialize, but I do know that your organization is a very respected one with a worldwide reputation, that you have a good knowledge of the eight nations that engage on a regular basis in offshore exploration and drilling and that you have a good understanding of the regulatory regimes and state-of-the-art situations in that regard.

I might simply say first that we must leave here at 10 o'clock because the television crew is needed in 257 East Block for the meeting that takes place after ours, so they must get going at that time to set up, and we need some time for review of our budget. I have circulated it now to the steering committee, so we will be able to make some headway in that regard, hopefully at quarter to 10.

We should have close to an hour and a half or more. We are looking forward to what you have to say, Mr. Stewart, and then we will ask our questions.

Craig Stewart, Director, Arctic Program, WWF - Canada: Good morning, honourable senators, and thank you very much for inviting me to make a presentation to you today.

The World Wildlife Fund actively and constructively engages with the oil and gas industry from the Barents Sea in Norway to the Timor Sea in Australia. We have decades of experience working with governments and industry the world over, and although our views may differ at times, we have achieved notable successes together.

We need oil. We are running out of oil. We need to get off of oil, but alternatives will take time to mature. These simple facts frame the debate emerging from the disaster in the Gulf.

Oil is not leaking presently into Canadian waters from offshore rigs. We have no present calamity to spur our country into immediate action. Our regulatory system has not been tested by a disaster and proven deficient the same way the American and Australian systems have over the past 12 months. Indeed, the WWF has recently held up parts of the revised Canada Oil and Gas Drilling and Production Regulations as an example for Australia to follow.

Nevertheless, the proximity of the Gulf of Mexico and Timor Sea disasters months apart in two of the world's developed nations should give us reason to pause. Offshore drilling is a technically challenging endeavour, even in shallow waters. Drilling a well seven kilometres deep in over a kilometre of water, even when it is not iced, stormy or dark, has been likened by industry experts to walking a tightrope. It is an impressive endeavour, and there is a reason rig workers receive danger pay.

Do we need a disaster in Canadian waters before we shore up flaws in our system? Have we not witnessed enough to be proactive here? You know, as I do, that there are few times when the political will and energy can be focused sharply enough to effect true change. Now is one of those times.

Our regulatory framework, like that of many other nations, is partially based on lessons learned from the Piper Alpha blowout, a 1988 offshore incident in the North Sea that killed 167 people. However, unlike the United States, Norway and Greenland, we do not require formal documented regulated reviews that inform the decision on whether or where to drill in the offshore, and even the Canadian regulations on how to drill ignore some fundamental recommendations from the inquiry after the Piper Alpha incident, and that is what I want to speak about from a national perspective today.

I will not repeat my full testimony to the House of Commons Standing Committee on Natural Resources on May 25. That submission is on the record and we will get a copy to you. However, please see the chart I have provided in your package. It is a comparative chart that compares us to Norway, the United States and Greenland and describes the regulations within each of those countries. It is in blue.

The Chair: By the way, sir, we have all seen the announcements about contemplated exploration and drilling in Greenland, so anything you can tell us in terms of the impact on Canada, is it a threat to us and so on, we would be happy to hear your views on that.

Mr. Stewart: Okay. As you can see from the chart, Canada does have a regulatory process on how we drill, which is the lower line in the chart. However, at the front end of the process, we do not have a regulatory process governing the decision around whether and where oil and gas development proceeds. As a result, the Canadian government awards exploration licences and binds oil and gas companies to multi-million and even billion dollar contracts before, in the Arctic case, the National Energy Board steps in to regulate how drilling is to proceed. As a result and in contrast to the United States, we give oil and gas companies broad license over significant tracks of ocean, including environmentally sensitive areas. As a result, should a blowout and spill occur in those areas, an operator has little time to contain the oil before damage is done. This is in contrast to the United States where the leasing is done in specific parcels that avoid environmentally sensitive areas. It is a much more directed process.

Here are some of the implications of that failure. If you look at map 2, in Canada we license operators, and here is an example from the Arctic where licences have been given to drill in

environmentally sensitive areas outlined in pink. Those pink areas have been defined by the Department of Fisheries and Oceans. The lease to British Petroleum straddles the Beaufort Shelf, a biologically productive region heavily used during the drilling season by bowhead whales, a species at risk, as well as ring seals and a variety of pelagic birds. In fact, leases overlap with two thirds of the environmentally sensitive areas identified by DFO. Not just environmentally sensitive areas are affected. The first marine-protected area proposed for the Beaufort, a beluga whale sanctuary which has just been gazetted, has an operating gas well deep inside its protected zone and can be criss-crossed by pipelines.

This deficiency is well recognized by the federal bureaucracy that has been innovative and solutions-based. Over the past decade at least, through a series of innovate partnerships with the Inuvialuit, departmental staff at Indian and Northern Affairs Canada and the Department of Fisheries and Oceans and others have designed a series of soft processes to shore up our management of the Beaufort. I will speak about the Beaufort at the start and then move to the east coast.

The Chair: We understand there is no drilling going on up there, so this is only informative for us and educational about the regulatory process; is that correct?

Mr. Stewart: That is correct. Although there is no drilling, there are contractual obligations to drill by 2014, so there will be three wells within the next five years. It is important that decisions made now will influence how those wells get drilled and how further leasing occurs. That is why it is relevant

Senator Banks: I am looking at map 2. It says significant discovery licences. Discovery, there must have been a well drilled.

Mr. Stewart: That is right. There has been drilling since the 1970s throughout the Beaufort Sea. There is a long history of drilling in the Beaufort. It has been active since that time. The most recent offshore well was drilled by Devon in 2005. They were looking for gas. They hit oil instead and they ceased drilling. At this moment in time, there is no active offshore drilling but there has been in the past and it will happen in the future.

Senator Banks: Thank you.

Mr. Stewart: For example, in 2004, given the history of drilling in the area and anticipating drilling in the future, the Beaufort Sea strategic regional plan of action was initiated at the request of the Inuvialuit. After an intensive two-year process, it resulted in a series of recommendation for addressing the cumulative effects of oil and gas development, which were based upon lessons learned from the history of over 20 years of drilling in the offshore and near shore there. The recommendations have not been funded and remain poorly implemented.

Similarly, DFO and the Inuvialuit have co-led the **Beaufort Sea Partnership** initiated in 2006 and joined by CAPP, WWF, the Governments of the Northwest Territories and Yukon and a host of federal departments. That partnership completed a plan in June 2009 for co-managing the Beaufort Sea. It would address some of the regulatory gaps I have identified; however, it remains unfunded and unauthorized a year later.

In another case even more recently, bureaucrats recently designed a process called a **Beaufort Regional Environmental Assessment** which would be analogous to and even better than what U.S. regulators have done in the Alaskan offshore. The Inuvialuit supported it; industry supported it; we supported it; federal departments supported it, but the government unfortunately killed it in Budget 2010.

Here are three examples of innovation exercised by federal bureaucrats, the Inuvialuit and the oil and gas industry which have all arisen to fill a regulatory void. However, because they are unregulated, they have consistent problems, and these have been raised by us and industry. They do not help offshore operators manage their risk because the processes are non-binding and soft. They do not help manage the potential conflict between ENGOs and industry, environmentalists and industry, because government departments can ignore the results. They do not attract funding because government departments can de-prioritize them as voluntary. Without funding, they cannot be implemented, so we have a cycle of soft or voluntary process after voluntary process after voluntary process because there are no regulations governing this, unlike Greenland, Norway and the United States. This cycle of inefficiency is the result of a broken regulatory framework.

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<http://www.beaufortseapartnership.ca/>

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Now I will get specifically into the question of how we drill, which I think will be even more in line with what the committee's interest is. As mentioned previously, the Piper Alpha explosion in the North Sea incited regulatory changes worldwide to assure safety in offshore rig operations. In tandem with preliminary findings from that Australian explosion, three key findings emerge.

First, when a regulatory framework promotes interagency turf wars, the ensuing lack of communication and coordination can have dire consequences. The inquiry into the Piper Alpha found that government regulations are perpetually fought by the oil industry. At the time of incident, the lack of coordination of dispersed regulatory authorities and the interests of the government in accelerated oil production contributed to the neglect of safety features and procedures aboard the platforms.

The maintenance error that led to the Piper Alpha disaster was the result of inexperience, poor maintenance records but also deficient learning mechanisms within the company and the fragmented government agencies dealing with it. I raise this because in Canada you will note that offshore oil and gas operations are directly managed by the National Energy Board, two offshore petroleum boards, two federal departments and a host of other organizations that have a hand in the approval process. You can imagine the directions companies receive and the processes laid out across the country are not consistent and can sometimes be conflicting.

After the Piper Alpha, a key recommendation of Lord Cullen was to employ a risk assessment model structure that can allow assessment of different safety measures given the probability and severity of various accident scenarios. Twenty years later in Canada, we still do not have a regulator or even a formalized approach to managing risk. There is a whole body of risk assessment and an actual regulatory process in the United States that conducts and establishes the probability of an accident occurring and then how to address that probability when laying out safety guidelines.

This lack of a framework is at both the leasing and exploratory well approval stage. A blatant case example is that the worst-case scenario envisioned by Chevron in its Orphan Basin Newfoundland drilling plan is a blowout and spill lasting 10 days, which we would see as incredibly optimistic, given what we have just witnessed in the Gulf.

The Chair: Yes, with what we know now.

Mr. Stewart: In the case of the Piper Alpha and Timor Sea inquiries, analysts have pointed out that regulatory authorities often do not have access to independent experts to evaluate requests for exemption or deregulation. They have to rely solely on the expertise of the oil and gas companies themselves.

You heard from Mr. Ruelokke in a previous session, the Chair of the Canada-Newfoundland and Labrador Offshore Petroleum Board. He spoke to the media yesterday, and he echoed that we trust industry. That is where most of the expertise is and that is who we trust.

However -- and this is important -- that petroleum board removed the requirement to identify and contract stand-by relief wells from its regulations in April 2009. There has been a huge controversy over the proposal to the NEB to remove relief well requirements in the Arctic. After the Prime Minister signalled it would not be acceptable, they ended up cancelling the review process this past month. However, in April 2009, the Canada-Newfoundland and Labrador Offshore Petroleum Board did exactly that.

I cannot say who they consulted. However, they did introduce a significant problem with their Orphan Basin oil spill contingency plans when they did this. Chevron has optimistically said it will take 11 days to source, contract and transport a relief well from Gulf of Mexico, and if their contingency plan is based on a worst-case scenario of a 10-day oil spill, then something does not add up.

In addition to all of this, offshore drilling requires a comprehensive environmental study. Since 2005, only an environmental screening is required, which seems completely inadequate for an activity with the potential consequences of offshore drilling that we are seeing in the Gulf.

Furthermore, in the Arctic case, if any spill would occur there, based upon extensive studies in the 1980s by Environment Canada, we know we could not clean up the oil with current technologies. Based on the experience in the Gulf of Mexico, as Mr. Ruelokke correctly explained, they expect

they will be able to clean up less than 5 per cent of oil spilled in the Atlantic, given the severity of wave action and the challenges in the North Atlantic of cleaning up that oil.

To sum all of this up, the regulatory regime in Canada is far from perfect. We certainly have strengths. We do some things better than any other nation, but we have our flaws, too. In Canada, we have two deepwater wells off the East Coast and more are expected. We are planning to drill up to three deepwater wells in the Arctic by 2015. Deepwater offshore activity, the riskiest kind, is still nascent in this country but is ramping up. Indeed, Indian and Northern Affairs Canada is currently calling for bids for the first entirely deepwater lease in the Beaufort Sea, and that will require a well in five years.

Activity now is still at a low level. We have a grace period now to get things right. We can spend this time in denial that flaws exist and say we are perfect, or we can craft a proper national review to address regulatory deficiencies around the questions of whether, where and how we drill.

Let me put it another way: Never again can an environmental screening describe the potential environmental impacts of offshore drilling as insignificant. The potential impacts are quite large.

The Chair: Depending where it is done.

Mr. Stewart: Yes, and depending whether an accident occurs or not, but you cannot predict the accidents. If it is an environmentally sensitive area, it will have more impacts than if it is somewhere else.

The Chair: If you are a couple of miles off the mouth of the Mississippi River, it is quite different than being many miles into the North Atlantic Ocean, right?

Mr. Stewart: That is right. Unless the federal government steps in and resolves these flaws, though, we are headed for an ad hoc litigated process. It will end up being a mess. It will introduce delays, prove inadequate to manage industry risk -- we want to attract investment to this country -- and that will fail to protect the environment and the livelihoods of the people who live in local coastal communities.

The alternative, in our view, is to call a full but time-limited commission of inquiry. Canadians need reassurance that our offshore drilling activities will not endanger the livelihoods of local communities or harm the environment. However, this reassurance cannot be just blind faith in our regulators or industry or dismissive statements about the remote possibility of oil spills in Canada because we cannot predict them. We believe our leaders need to be vigilant in the face of this new reality, which we are now witnessing.

We congratulate the Senate committee for taking on these emergency hearings and suggest that you endeavour to make recommendations about the scope and administration of such an inquiry in order to shore up our regulatory system.

WWF has also congratulated the National Energy Board for its proactive announcement of an inquiry, and we would do the same to the Premier of Newfoundland for quickly announcing a review of activities there. However, we do question, in the NEB's case, whether their inquiry alone can address issues, which I have mentioned and that stretch beyond its present jurisdiction.

The NEB is placed in a potentially untenable position when a \$1.2 billion contract that requires a well results from an unregulated process before their regulatory administration even begins. The NEB does not have jurisdiction over all offshore waters. Finally, the NEB typically precludes the granting of intervener funding to ensure a level playing field for all participants, and we strongly maintain that the leaders of Arctic and coastal communities generally need to be fully supported in their desire to participate in such a review. If the NEB cannot support such requests, an alternative model needs to be found.

Canada needs a consistent set of regulations that safeguards our environment, our coastal communities and other industries that apply to leasing exploration and development from coast to coast to coast. If the National Energy Board cannot choreograph such a nationally inclusive process -- and they are mandated to do so under the Inquiries Act; it is a matter of whether they can compel the others to join the process -- then a time-limited commission of inquiry should be struck with the purpose of raising Canada's oversight of offshore oil and gas at least to standards, for instance, set by the Arctic Council in 2009.

As we have seen the American regulatory process has proven inadequate to prevent a significant disaster, I would put here that our regulatory process is no better overall than the Americans.

The Chair: Thank you, Mr. Stewart. We will go to questioning, but first I omitted to introduce senators, which is usually my practice. I am Senator David Angus from Quebec. To my immediate right are our researchers and support staff from the Library of Parliament, Sam Banks and Marc LeBlanc. To his right is Fred Dickson, a senator from Halifax, Nova Scotia. To his right is Senator Richard Neufeld from British Columbia, Senator Bert Brown from Alberta, Senator Judith Seidman from Montreal and Senator Linda Frum from Toronto, Ontario.

To my left, I believe you have met Ms. Lynn Gordon, our efficient clerk of the committee. To her immediate left is Senator Tommy Banks from Alberta, who is my predecessor as chairman here. To his left is Senator Dan Lang from the Yukon, Senator Robert Peterson from Saskatchewan and the senator who stepped out for a moment to go to a meeting but will be back is Senator Paul Massicotte from Quebec. That is who we are.

I had a couple of preliminary questions, if I may, in the absence of my deputy chair, Senator Grant Mitchell of Alberta, who is not with us this morning.

First, you have had an opportunity to read the transcript of the two witnesses who came before us a week ago from the two East Coast regulatory boards, the Canada-Newfoundland and Labrador Offshore Petroleum Board and the Canada-Nova Scotia Offshore Petroleum Board. You have referred to Mr. Ruelokke, and I was not aware that he had gone public to the media yesterday. You might tell us a bit more about that, where it was and what he said.

Also, I think in your own interests and for our viewers, we are not all familiar with the World Wildlife Federation, its scope and why you are interested in these matters. Some people have a view because we get nice fundraising letters and nice little stickers with birds and wrapping paper and all of the above, which is much appreciated and works in my case, but I think it would be helpful to us to hear about that and from whence you derive your authority to talk to us about these things.

Again, you have been quite strong, if I may use that word, in your criticism of the overall Canadian regime, with bureaucrats not having generated a good plan, it not being implemented. You have used the word "soft" or "voluntary" in many cases.

You have also indicated that the present government has withdrawn or not gone forward with sufficient funding. I would like to have it in context here to ensure we understand how it could cause a hazard to the actual status quo in the east coast.

Finally, we are quite open, given that you seem to approve of our process here of having these hearings, to you suggesting people you think would be in our interest or would be useful to hear as witnesses. We are having some, in the time frame available to us, difficulty in getting not only the people from the bureaucracy who, I gather from your evidence, are very knowledgeable. So many departments are involved and I think there is a priority of who is the lead and one does not want to come until the other goes to the point where we are pretty confused here. Maybe you can help.

I do not want to dominate, but those are some of our preoccupations. If you could take a stab at at least the first part, and then I will turn to my list of questioners.

Mr. Stewart: I will give you a bit more background first about the World Wildlife Fund.

The Chair: Would you please, sir.

Mr. Stewart: WWF, or the World Wildlife Fund, was established in the mid 1960s by European royalty. It was meant to be a complementary organization to the International Union for Conservation of Nature. It has offices in about 95 countries worldwide, employs about 5,000 people, headquarters in Gland, Switzerland. We run an international Arctic program and we also run an international oceans program. The Arctic program is currently based in Oslo, but we will be moving to Ottawa this summer. We have offices in Sweden, Finland, Norway, Russia, United States and Canada that work together.

One of the key issues that we do work together on is offshore oil and gas management. We have worked closely with Statoil and the Government of Norway to effect overall oil and gas management

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planning in the Barents Sea. We believe that is basically a world standard, that they have done an excellent job of it. The oversight there is the best we have seen.

We have experience in working with industry and working with governments in order to get an appropriate management framework in place. We also were active after the Timor Sea disaster. WWF Australia was active after that incident and pulled from our international expertise to make submissions to the commission of inquiry that occurred there.

The Chair: When we hear WWF Australia, Canada, Norway, these are all national branches of the international organization? They are not independent and different with different mandates? They have a common purpose?

Mr. Stewart: They are somewhat independent. Each one has its own board, so it is not a direct reporting structure to an international organization. Our CEO reports to a Canadian board. He does not report to an international CEO. I would say it is a network or a loose federation as opposed to a strict hierarchy.

Funding mostly comes from the private sector, not necessarily from governments, and also private citizens.

The Chair: You do get some government funding?

Mr. Stewart: We do in places. Currently I do not believe we receive funding in Canada. We work on particular projects in partnership, but it is not by any means any key source of funding for us.

We are interested in this particular issue because we believe that we are pushing into more and more remote frontiers necessarily in order to obtain oil because oil demands are increasing and we are beginning to run out of it. This means that oil and gas exploration is pressing against wilderness areas, of course which we have an interest in, and affecting wildlife habitat, or it is pushing into areas such as the offshore, which are potentially important environmentally sensitive areas, and we want to ensure those areas are safeguarded into the future.

That is our interest, and it is not just a Canadian interest but a worldwide interest, and in particular we have an Arctic program. We have offices in Canada in Halifax, St. John's, Toronto -- our Canadian head office is in Toronto -- in Ottawa, St. Albert or Edmonton; we have offices in Prince Rupert and Vancouver.

The Chair: That is quite a large operation. How many people?

Mr. Stewart: In Canada there are 125 people.

The Chair: They are on the payroll? That is their livelihood?

Mr. Stewart: Yes. You asked a question about Mr. Ruelokke.

The Chair: Yes, inasmuch as he was just here and we did not know he was holding a press conference.

Mr. Stewart: He held a press conference and said now is the time to speak with the media because he had testified to you and to the parliamentary committee and done his briefings up, and the media had been trying to speak with him for a while. He laid out some technical, fascinating details that despite the incredible amount of effort and over a thousand boats involved in the Gulf effort to clean up the oil and kilometres of boom that had been laid, that despite this incredible effort they had only managed to get 5 per cent of the oil. He said in the North Atlantic you can expect it will be much more difficult. He said we are studying what the effects would be. How would the waves actually disperse the oil and would that have a negative or a positive impact? The waves are now dispersing it and scattering it further, so maybe it is not as much as a concentrated impact, I think is what he was getting at. That raises questions of where that oil will go. Will it end up on the Atlantic coast or in New England or Greenland? The Orphan Basin, in the case he was speaking about, is between the Labrador and the Gulf current, so it could go either way.

The Chair: Did he do this here in Ottawa?

Mr. Stewart: No, he did it in St. John's, I believe. I only heard it over the wire after.

He did a good job of essentially putting out reassurances and said we are looking into innovation. Blowout preventers may not be the be-all and end-all; we may be trying to promote innovation to move to other technologies. He also alluded to additional oversight measures that they would be announcing in the coming weeks. These were all pieces that he spoke to.

The one piece he did not speak to that the media asked him about was the relief well question. This has been an ongoing question. Where if needed would there be a relief well? Where would they source one from if they needed it? He is in a particularly difficult situation there, as is Chevron. That well is so deep; there are only 50 other rigs worldwide that can drill as deep as that, and as one can imagine, they are in high demand. If you are to have a relief well on standby and leave it there on standby, you are taking it out of commission from drilling somewhere else, which is an expensive proposition when the chances of an accident are of reasonably low probability.

It does not appear they have contracted or identified a relief well at this point, but they are eyeing relief wells in the Gulf of Mexico. There is an open question about how you strike the balance between cost and contracting a relief well, not knowing when an accident will occur, whether that relief well will be employed at that juncture. You could let a contract for the relief well; the contract could expire or a demand could be placed on that rig to drill somewhere else at the time the accident occurs. It is difficult to predict.

Somehow we need to find a much better process for developing relief wells that are commonly available for a region and can be drawn upon when needed. That is one piece of the puzzle that I suggest we need to do a better job of figuring out. They are trying to figure out how to handle this right now. They removed the requirement, the need to identify the relief well, a year ago because they had assurances that it would not be needed from industry.

The Chair: You have covered well my points there, but having analyzed the evidence that both Mr. Pinks and Mr. Ruelokke gave before us, is there anything you disagree with? Can you either reassure us or worry us in terms of the completeness and the accuracy of their testimony?

Mr. Stewart: It would not be errors of commission that I would disagree with; it would be certain things they left out. There is the relief well issue. There is the question on the structure of those offshore petroleum boards that they are basically handling the money from the leases coming in and they are also providing oversight to the industry. That is different.

We have held Canada up as being different from the U.S. because the National Energy Board does the regulatory oversight, but Indian and Northern Affairs actually does the leasing and all the bidding. We have a separation there. This was seen as a problem with the Minerals Management Service in the U.S., where recently Interior Secretary Salazar split it into three different pieces because he thought they were an internal conflict of interest for one agency to be doing both roles.

There was a question posed to the chairman by the media yesterday, about whether that offshore petroleum board is correctly structured given this problem. Is there an incentive there to be closer to industry than needed, or is that in the public interest? This was a question that came up. He said they felt they could keep those issues completely separate because they have an internal reporting structure that safeguards against that conflict of interest. That is how he answered the question.

The Chair: Is there a conflict or cross-purposes as between our federal and provincial authority? I gather these are two boards that are jointly managed, administered and financed by provincial and federal. Is that correct?

Mr. Stewart: I cannot speak specifically to the structure because I have not fully analyzed it. All I can speak to is that somehow we need to ensure that based upon the outcome from the Piper Alpha accident in the North Sea, where they found that the different regulatory interests sometimes gave conflicting information and therefore industry was left with some conflicting information that they believed was a contributing factor to the accident that occurred, we have to ensure that things are crystal clear for industry in this country and that you do not end up with these turf wars between agencies or you do not end up with conflicting information or advice given to industries.

The Chair: To put it graphically, and what I was getting at with that question, if our minister of, say, the Department of Fisheries and Oceans, NRCan or the Department of Environment were to make a statement with respect to those oil drilling operations in Hibernia, Orphan Basin and so forth,

is there a risk that Danny Williams would stand up and say: "Get out of my backyard. That is not for you to say; it is for me, the premier, to say." I do not know. Could you tell us?

Mr. Stewart: It is quite possible that would happen.

The Chair: Thank you for those preliminary answers.

Senator Banks: Thank you for being here, Mr. Stewart. I gather from what you have just said in answer to the chair's questions that you have your druthers that in a perfect world, there would in Norway, Louisiana and here be a regulatory/oversight agency that stands on its own and does not have anything to do with anyone else. Is that right?

Mr. Stewart: No. I do not think that is possible. You would end up with a monstrous regulatory agency. I think it is important to have that division to ensure there is no internal conflict of interest. You need to separate out the way they have separated out the Minerals Management Service.

I think it needs to be closely choreographed, that somehow you need to ensure these agencies are working much better together than they do presently.

I will give you a specific example. Based upon the second map I have just given you, the Department of Fisheries and Oceans identifies environmentally sensitive areas on the one hand. They are non-binding; they are just identified. These are areas that if marine-protected areas were to be established over the next decade in the Beaufort Sea, this is where they would likely be established.

On the other hand, Indian and Northern Affairs is in charge of leasing. Indian and Northern Affairs knows about that map, but they are not bound to it, and they do not necessarily coordinate on leasing. They do not coordinate as closely. There is some inter-agency conflict that does occur as a result of leasing decisions made by one department and on top of environmentally sensitive areas as prescribed by neither department.

The result of that is the conflict then gets downloaded to industry and environmental groups later in the process. We do not want them drilling in those environmentally sensitive areas, but they have just paid a whole bunch of money to have the rights to do so.

Senator Banks: They are required by the agreement. Is that right?

Mr. Stewart: Yes, they are required by their agreement to do so. That is the piece that somehow needs to be much better choreographed and worked out. I do not have a specific solution, but because it is a problem beyond the jurisdiction of simply the National Energy Board, we need a broader process than what has been put forward so far in order to get at that and to ensure it works better.

Senator Banks: You said that the NEB is not in charge of all of this. Is that because of, for example, the two Maritime boards that the chair has referred to?

Mr. Stewart: Geographically, yes. There is a geographic question where NEB is responsible for the Arctic and in some cases part of the St. Lawrence. There are two offshore petroleum boards that have their own jurisdiction.

Senator Banks: Is there anyone else?

Mr. Stewart: Not geographically because there is a moratorium on the Pacific side right now. However, as far as the scope of the process, there is also a division, where the front end of the process is administered in the Arctic by Indian and Northern Affairs Canada, and the back end of the process is administered by National Energy Board. It is fragmented, maybe necessarily so to avoid the conflict of interest, but it needs to be much better choreographed and we believe regulated from start to finish.

Senator Banks: You held out Norway as an example of the best that appears, in your opinion, to be available now. You used the word "oversight." This committee has often observed, at least some of us have, that you can have all of the regulations in the world written down, but if they are not enforced or someone is not looking at the question, they do not do any good.

I do not know this, but I will suggest that if you looked at the regulations that apply off Louisiana in terms of the way they look on the page, they are probably pretty good. The Americans are not stupid. They are probably about as good as the Norwegian ones. I am guessing, but you are nodding.

Do we therefore assume that the difference is the degree of oversight and intrusive, if that is the word, examination in the operation?

Mr. Stewart: Yes. I have to state that WWF is involved in litigation on the North Slope of Alaska for precisely that reason. We believe that even though they have strong regulations on paper, the way that they administered a particular process in the U.S. Arctic was very deficient. We do not actually get involved in litigation often, but this is --

Senator Banks: Are you talking about offshore?

Mr. Stewart: These are offshore Shell leases that were let. You have perhaps heard a bit in the media about the Shell leases off the North Slope. The question was that government did not do its job. It did not actually implement the regulations they had very well. When they did their environmental assessment, they did not do a great job of it.

There is a difference between having an effective or very good regulatory structure and then implementing that structure very well. In the U.S., it appears that it was the implementation that they fell down on. In Canada, we are speaking more to the actual regulatory framework in saying that we believe that needs to be corrected.

Senator Banks: You said in your remarks that after Piper Alpha, the inquiry found that "government regulations are perpetually fought by the oil industry." Before that, you said that the Beaufort Region Environmental Assessment Program, which would have been analogous and even better than what the U.S. has in place, the Inuvialuit supported it, industry supported it, you supported it and the federal departments supported it. In that case, at least, it appeared that industry was not opposing the regulations.

Mr. Stewart: No. The reason was that particular case example was well structured, where it would streamline the regulatory burden over a period of time for industry.

Senator Banks: "Streamline" is a word that strikes fear into the hearts of environmentalists.

Mr. Stewart: Yes, but in this case, what that particular process does is an environmental assessment of the entire region.

Senator Banks: Were you in favour of it?

Mr. Stewart: Yes, because you would do it up front and it would reduce duplication. Instead of BP, Imperial, ConocoPhillips and every other one having to do the same environmental assessment over and over again for their operation, you would do it up front once for an entire region.

For us, that would provide a framework for assessing the cumulative effects of each of these ones. It provides us with the certainty that you will have a much more holistic or ecosystem view. For industry, it reduces the burden because then they have less onus on each of their individual processes. It actually is a win-win, and win-wins are absolutely possible.

Senator Banks: That sounds effective and efficient at the same time.

The Chair: You people from WWF are interested in protecting the environment and its pristine nature, but there is also a thing called human life and limb and other property. When the Deepwater Horizon exploded, I think 11 lives were lost and some 28 people were seriously injured. When we talked about allaying the fears of Canadians about the risks and dangers that may presently be inherent in our offshore operations, we are interested in that aspect too. If you can add anything in that regard, we would be interested.

Senator Peterson: There is a saying that nothing focuses the mind better than a hanging in the morning. I think the incident in the Gulf of Mexico is that issue right now. It is monumental and it could take down British Petroleum, which is third largest in the world in size. When you talk about the legal liability, the insurance liability went from \$75 million to \$10 billion. It seems to me that, in

itself, would have companies looking carefully or they would not have kept their licence. That is something we should keep in mind.

Mr. Stewart: Absolutely.

Senator Peterson: Second, drilling in the Arctic is much different than the North Sea, the Gulf or anywhere else in the world. I think modelling would have to take into account, in the event of an accident, how we would deal with this. When you get this under the ice, it is a whole different scenario, so that has to be done.

On the matter of a regulator, having all these jurisdictions seems confusing. They are all being lobbied and one does not know what the other is doing. I was particularly surprised to see that INAC would be calling for bids in the North. Is the expertise there? That is startling. I would be interested in your thoughts, addressing those issues as we move forward.

Mr. Stewart: I will try to speak to the chair's question and Senator Peterson's question simultaneously. The one key factor about drilling in the Arctic is the human element. These deep offshore rigs are technological marvels. You are taking what is, at the start, a high-risk exercise. Think about it. You are trying to nail a pool that is seven kilometres down under a kilometre and a half or two and a half kilometres of water. You will try to drill a straw into it and avoid the innate pressure there from blowing back through.

It is a high-risk endeavour. Through incredible innovation, they have reduced that from being a high-risk event to a low probability of risk event. However, then we put humans in charge of it. As we know, we make mistakes.

When we report to different companies – because as we have seen in the Gulf, you had Transocean employees, BP employees, Haliburton employees and regulators – you have a mix of people there. There will be those interpersonal relationships and they are reporting to different people, so you can get confusion. Then add to that, in the case of the Arctic, that you are drilling in unpleasant conditions. It can be very cold, obviously, and you have to deal with ice.

I have heard stories of people who worked in Kuluk Bay for Gulf in the 1980s. They would go out in pack ice and the pack ice would be moving around the rig and you would get vertigo. It seems unreal that you are actually there. Then you have dark and stormy weather. Put all of that into the mix and you can see why it is possible that someone would forget a particular measure at a particular time that was supposed to happen, or skip a step on a checklist, or fail to communicate to the next crew coming on board the rig appropriately when a maintenance cap has been left off.

You can see how these things would happen. Despite the best technology and the best regulatory oversight, accidents will happen and people will die as a result of it. Oil will get spilled and the environment will be affected.

We cannot absolutely safeguard against that. We cannot stop a space shuttle from crashing. We cannot guard 100 per cent against plane crashes. Accidents will happen.

What we can do is try to minimize the effects of such an accident occurring with regard to human safety – make sure we have emergency response measures and that people can quickly get off the rig. It was amazing that only 11 people died in the Gulf, when you see how incredible that explosion was and how quickly that thing went down.

We need to have the emergency preparedness and the contingency plans in place to guard against this low-probability event. We cannot get into the trap of saying it will never occur, because it will.

Senator Peterson: In view of this, would you recommend that anything should be put on hold until everything that has happened in the Gulf is analyzed, and it is determined what went wrong and what the outcome of this could be? That insurance liability is going through the roof right now.

Mr. Stewart: WWF - Canada has not called for a moratorium at this time. We have let local communities take that on. The Inuvialuit have called for a pause. Leaders across the North, premiers of all three territories, have called for a time out.

The Chair: Everywhere or just in the Arctic?

Mr. Stewart: Across the Arctic – that is their interest.

The Chair: You are not recommending a halt on the East Coast, are you?

Mr. Stewart: We have not called for a halt on the East Coast. We think it is up to the local communities and their elected representatives to make that call. At this point, we have not. Whether we halt or not, we do think this is the time to take a serious look at our regulatory framework; conduct a thorough review of it and try to address some of these questions that I have raised, and other questions that others have raised as well.

Senator Neufeld: Some of the things you say are very interesting. I want to go to your presentation and ask a couple of questions of it. On page 2, about the fifth paragraph down, you talk about a beluga whale sanctuary that has just been gazetted, which means it is being planned and put in place. You say there is an operating gas well there and it allows pipelines.

The well was there before the plan – or before it was gazetted, obviously; is that correct?

Mr. Stewart: It was there before it was gazetted. However, since the early 1980s, that area has been classified internally by the Inuvialuit; it is their highest degree of protection. It has existed; it is just being formalized.

Senator Neufeld: I will not argue that part. I appreciate that there are all kinds of areas. I am familiar with the West Coast. It seems as though all the important places that need to be put off limits, are where the natural gas and oil is. In this case, there was a well there. You say it could be crisscrossed with pipelines, which could be possible.

Are you suggesting that that well should be decommissioned? Why do you even mention that?

Mr. Stewart: I raise it because the leasing process at the front end is beginning to cover the entire Beaufort, environmentally sensitive areas or not. We know in advance where these sensitive areas are. Whether they are formally protected or not, we know where they are. They are candidate sites, potentially, for marine protected areas. Because they have not been formally protected does not mean they are not important.

Senator Neufeld: I am not suggesting that.

Mr. Stewart: We believe those areas should get some sort of special consideration during a leasing process to reduce conflict and increase certainty for oil and gas operators. Oil and gas operators and environmentalists will have to fight it out over the areas that are deemed important. We need do not need to get to that point. We can address this up front. Those pools are substantial and probably can be drilled from a number of locations on the surface. They do offshore directional drilling all the time, so there is a possibility. There is a possibility of getting a win-win, if we know up front where the important areas are and they are properly factored in. If you set up a regime that does that, then you can make it work.

Senator Banks: With respect to the question that Senator Neufeld asked you, did I understand you to say that that problem could be partly be addressed by smaller, more specific leases, as in the United States, rather than great big ones, as in our case?

Mr. Stewart: That is right. That is one potential solution, and you work with the industry to determine where they want to drill from, and then you avoid areas like the Beaufort shelf by putting some sort of buffer around it, and then you let the leases so they avoid that buffer.

Senator Neufeld: You say further down on that same page that everyone supported a process of doing an environmental assessment on the entire region that was anticipated to be let out for bid. I have heard of those processes before. Can you tell me how long it would take to do an environmental assessment for an entire region, of, for example, 200,000 hectares of land or sea base? How involved would that be? The industry may say they will try to drill four or five exploratory wells, and they may find a good find, but they may in the second well find absolutely zip and away they go. They have spent all that time, effort and money to do an environmental assessment over the whole area for naught because no one will go back there and try again, at least, not in the near future because that information is released publicly after a number of years.

How extensive was the environmental assessment that you are speaking about? Is it a screening, a general look or does it get in depth? My onshore experience has taught me that it was the same thing; I have not done anything offshore. The environmental agencies wanted to do an in-depth environmental assessment on an onshore area that is sometimes hundreds of thousands of hectares. There are areas that they will not go into. It becomes redundant.

Mr. Stewart: First, I would say that if a company pledges a work commitment of \$1.2 billion over the next five years, they are reasonably confident that they will find something.

Senator Neufeld: They are not always sure.

Mr. Stewart: They are not always sure, but they will spend that money no matter what. We are talking about a fraction of that. WWF and ConocoPhillips made a joint presentation to the NEB on this specific subject last summer, and we were in agreement. ConocoPhillips's estimation was it would cost \$30 million and it would take about 18 months to complete. Some said it was too much, that it would not take that much. They said that to do it right, it would take about \$30 million for the Beaufort to do a regional environmental assessment.

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Senator Neufeld: "Regional" meaning what they were actually looking at that time. "Regional" is not the whole Beaufort.

Mr. Stewart: It is the inner Beaufort, so it was to cover the inner Beaufort out to the area where we are expecting leasing to occur for the foreseeable future.

If you think about the \$30 million, the GST at 5 per cent on that \$1.2 billion alone is \$60 million. You are talking about a very small sum, and as far as time goes, we have heard they will not be drilling out there for the next four years, so it is not introducing any delays. It is expediting the process after you get to drilling and you find something because you have already done a comprehensive analysis, and you are ready.

In the case of the Beaufort, because we have been studying it and drilling there for 30 years, we have a fair amount of material to build upon. That is why they supported it and why we supported it. We said that we have this time now, so let us get it right. We think it is a solid proposal. It is not our proposal. The bureaucracy developed it with academic experts.

Senator Neufeld: You said the government killed it in Budget 2010. Can you tell me how the government killed it in Budget 2010?

Mr. Stewart: There was a cabinet submission made in advance and agreed on to have this go ahead, but the government could not find money. It is a trade-off during budget times, and the government decided it could not fund it, that it was not as much of a priority as other things they had on the table. At that point, the bureaucrats viewed it as an absolute rejection and decided that it probably would not ever be supported, so they have dropped it. In light of incidents, maybe it will get revived. I hope that it will.

Senator Massicotte: There was no policy decision saying we do not agree with getting the assessment. All you are saying, based on the information you have, is the bureaucrats made a submission for \$30 million. I understand that. Given the allocation process, they said "pass" at this point in time. Therefore, there was no policy decision but a lack of funding, and that is all.

Mr. Stewart: It was not a high priority.

Senator Massicotte: Are you aware as to whether it is a lack of funding forever, or is it a six- or nine- month issue? You said it would not happen for four years anyway.

Mr. Stewart: It was unfunded, so the initial reaction was that it is done because if this is the time to fund it, and if the government has chosen not to fund it or it is not a priority, then they took it as being off the table.

Senator Massicotte: Is that your interpretation, or the bureaucrats' interpretation?

Mr. Stewart: It is mutual.

Senator Neufeld: As I understand Bill C-9, the process that will take place is that the NEB and the nuclear industry are instructed to have intervenor funding. Could you explain what you mean when you say they do not grant intervenor funding, when Bill C-9, which we hope passes through Senate soon so we can get on with life, would provide the framework for that to happen?

Mr. Stewart: That would be wonderful. At this time, and this was through conversations with counsel at the NEB, for this inquiry, they expect intervenor funding to be unlikely, based upon their existing mandate. However, if Bill C-9 gets passed quickly enough, then quite possibly it would be available for this review. That would be wonderful.

Senator Neufeld: In British Columbia, we have had a lot of interaction with the NEB, and my experience is that they do provide intervenor funding, maybe not always and maybe not always as required, but there is a decision made by the bureaucracy to go ahead and do it or not. Would that be correct?

Mr. Stewart: I do not know. We talked to legal counsel. He said there was precedent set recently which they felt they needed to abide by for consistency's sake, so therefore they would not likely be. I cannot go into the specifics of it.

In our recommendations here is if the NEB can address these issues, if the NEB can choreograph a national process and because they are granted this power under the Inquiries Act, then certainly broaden their inquiry, ensure that the other regulatory agencies and departments that should be included are, and have the NEB lead the process. That would be the most preferable option. However, if they cannot, then we need another option.

Senator Neufeld: Most of that is anticipated in Bill C-9, in the transfer of those responsibilities to organize it more with one agency, being the NEB, for energy projects.

We had two people testify to us, and I cannot remember the name of the boards, but the offshore boards in Eastern Canada.

The Chair: Mr. Ruelokke and Mr. Pinks.

Senator Neufeld: One of the gentlemen told us that with the rules in place in Canada, as to offshore drilling, what has happened in the U.S. would not happen in Canada. That was an interesting comment, but I took it from an expert knowing the rules and everything.

Senator Banks talked about the rules that are in the U.S. and in Canada, and we asked those questions. They are similarly the same, but accidents do happen. Things happen. You can have it all written down. No one is perfect; you said that yourself. If you were standing on that ship, you may miss some of that in the heat of the day that something that has gone wrong. You can have all the regulations and sometimes you have too many of them that actually confuse the process. Would you agree with me? There must be some standard regulations.

Mr. Stewart: Yes.

Senator Neufeld: Would you agree with the people I just talked about who said the same thing would not happen in Canada with our rules and regulations?

Mr. Stewart: I blatantly disagree with that comment absolutely for the reasons you said. Accidents happen. I agree it is not just the regulations that are the answer; it is the implementation of those regulations as well. It is procedures onboard the vessel at the end of the day, common oil field practice to ensure things are done properly out in the field.

Senator Neufeld: When things are starting to blow up on a drilling rig, you do not first reach for the book on the shelf that tells you on page 82 what to do.

Mr. Stewart: No.

The Chair: Senators, we still have half an hour, but let us try to tighten it up.

Senator Lang: I very much appreciated your testimony, Mr. Stewart, and what you have presented. It certainly gives a broad perspective of the industry, and you are obviously very knowledgeable about it.

I want to get it clear on the record what you stated in your initial presentation, and I will quote:

We need oil; we are running out of oil. We need to get off oil, but alternatives will take time to mature. These simple facts frame the debate emerging from the disaster in the Gulf.

Comment [m5]: TO BE CONFIRMED

I take it from your presentation, as long as certain things are in the place, regulatory-wise and enforcement-wise, and hopefully new innovation for technology to help prevent what has happened here just recently, and in the past, that your organization is not opposed to offshore drilling.

Mr. Stewart: No. The WWF is not opposed to offshore drilling, we just need it to be done right. We believe the ultimate solution is to transition from oil, and we have programs for that, but that is not a reality right now. We are not opposed to offshore drilling, no.

Senator Lang: I wanted to get that clear on the record. We have talked about the regulatory process in the United States, and then in your presentation you talk on a more global basis. You refer to Norway, Greenland and also Australia. I would like to get clear in my mind, if Norway is the standard -- and I am assuming they are doing deepwater drilling, similar to what we do and going down as far as is being done I guess in the Atlantic and other places -- could you tell us what they are doing differently from us or the United States or Australia from the point of view of that oversight and that regulatory process that allows their industry to operate?

Mr. Stewart: There are two specific pieces that Norway is doing that I would point to. One is Norway has a process of marine planning that sets out where oil and gas can occur, where fisheries take precedence and then where conservation takes precedence. They have separated these out. That reduces the potential impact between industry, fishery and oil and gas, should an accident occur, and it reduces conflict. That is one key thing that Norway is doing and which the United States is about to, and you will probably hear more about this in the next couple of weeks. It is something the U.S. is about to implement and we should look at. It is called marine spatial planning.

You may have heard about goal-oriented approaches. It is often used by industry to say tell us what kind of cake you want but do not tell us all the ingredients and how to make the cake. We will figure that out. Just tell us what you want at the end of the day. It balances prescriptive regulation to ensure safety but allows that space for innovation to occur with industry.

Norway went in the 1990s specifically to a goal-oriented regime, but then when a few minor incidents occurred, they realized they needed to pull back from that and needed that balance of prescriptive with a framework that encouraged innovation. That is an example showing they learn very well. Very quickly after observing events overseas and within their own country, they have adjusted quickly and managed to achieve that balance, we think, rather well.

Senator Lang: I appreciate your response on that. It is something that Canada should be looking at in respect to the inquiry that will be undertaken. I am sure it will be reviewed.

I am a Canadian who does not know much about offshore drilling other than the fact that I know we do it and it seems to have been done, up to a point, fairly well. There is always a level of comfort, I think, that the technology was so advanced that we could do this, yet we see in the aftermath of this disaster that they are employing measures to mitigate this that -- no offence to my good friend Senator Banks -- Senator Banks and myself probably could have brought to the table, and that is my concern. Organizations such as yours and our committee and others really have to take a hard look at what is being done in the research and development and the technical side that we can cope this with this situation of human error when it occurs.

Obviously no one has paid much attention other than to say we have one option to deal with a disaster of this kind. It obviously does not work very well or at all. Perhaps you could comment on that. Does Norway, for example if a disaster happens there, have something else in place to do that we do not have?

Mr. Stewart: They are leading funders in this regard, and their concern mainly is cleaning up oil if it was spilled in ice-covered waters. They do not have specific solutions for containment and clean-up at this point, although they have been researching it. It seems no one has those solutions as this point in time.

You are correct that the key will be innovation. We need to figure out a way, first, to get beyond this place of saying accidents will never happen, because they do and, therefore, take this problem

seriously, which we probably will now, and say if we will be drilling in the offshore, as an international community and in this country, we need to foster innovation, promote innovation to address emergency preparedness techniques and equipment. We need to do a much better job of that. I do not have any specific silver bullet from Norway in this regard.

Senator Lang: I was impressed that in your presentation you talked about a time-limited inquiry so that it does not go on for a lifetime with very little, if any, results.

Mr. Stewart: The U.S. inquiry is limited to six months.

The Chair: Some colleagues may not be aware of the following, which I read in the **press**.

Nonetheless, the House of Commons on Wednesday overwhelmingly approved an NDP motion to review offshore drilling regulations that received almost unanimous support from all parties.

You must be pleased with that, sir.

Mr. Stewart: It received unanimous support; 274 votes to zero. We are very pleased with this. It goes even beyond what we have been calling for. The question, though, is whether the government will act on it. This sort of inquiry is important, but the question is whether it happens.

Senator Seidman: Thank you very much for being here this morning. I would like to pursue the line of questioning that Senator Lang began, because I find it rather perplexing.

I did read this morning on the front page of one of our national newspapers confirmation that BP had been drilling at 1,500 metres and that we in Canada will be drilling at 2,500 metres. You said today in your presentation, on page 4:

Furthermore, we know that if any spill would occur in the Arctic, based upon extensive studies led in the 1980s by Environment Canada, we could not clean up the oil with current technologies (which have not evolved in decades).

We should clearly be concerned that the technology to stop underwater blowouts a mile down has not progressed at the same pace as the technology to drill wells a mile down. Why is this?

Mr. Stewart: We believe that the mindset has been that through innovation we can stop blowouts from ever occurring, and therefore we do not need to worry as much about what happens afterwards. You heard that in Mr. Ruelokke's testimony. He is of the same mindset, as the head of a regulatory board. They believe that such an accident could not possibly happen in Canada.

Unfortunately, having that mindset is limiting, because you do not think about what safeguards you will put in place. A recent story in the *Alaska Dispatch* says that blowout preventers have been questioned by the industry since 2002. Chevron, in particular, which is the company that is drilling that deep well, believes that the technology is flawed and they are trying to come up with a completely different technology to shut off a spill, should it occur.

That sort of innovation needs to be encouraged, but it is cause for alarm when the industry itself obviously has questions about the current state of the technology.

Specifically, studies conducted by the mineral management service in 2002 and 2004 showed that blowout preventers cannot reliably cut and seal high grade steel pipe and welds. They also fail when tools -- such as drill bits -- are within the pipes. The preventers themselves are simply not strong enough to shut off that heavy grade pipe.

As a result of that pair of studies, we know that we need an alternative safety mechanism. It is not only this one in the gulf that failed; there actually may be a systemic flaw.

Senator Seidman: Does industry spend a portion of their profits on R&D and developing innovations that could deal with catastrophes that are bound to happen? It is just the law of averages that they will.

Mr. Stewart: In this country there is no specific R&D fund, although NSERC monies may have at some point been used for it. The industry is the partner that is spending the most on this sort of

Comment [16]: <http://www.edmontonjournal.com/business/Tighter+offshore+rules+expected+Canada/3104479/story.html>

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innovation. You are getting to the key question: Are they spending enough; are they taking it seriously when the mindset is that such an accident could never occur? That would be a key question to ask industry.

Senator Seidman: I am thinking about the tobacco companies that were required to create a fund from their profits that goes to research and health care given the societal burden and the risks associated with smoking. Given the risks and the potential societal burden associated with deepwater drilling, ought we consider some kind of R&D fund to which industry, and perhaps governments, would contribute?

This disaster in the gulf is now moving to the shores of Florida. There will be a huge impact on the economy, jobs and society as a whole.

Mr. Stewart: I think that is an excellent idea.

Senator Brown: I agree with what Senators Lang and Seidman are getting at. Before we had deepwater wells, Red Adair was putting out oil well fires. When the government in Iraq decided to set a few hundred wells on fire at the end of the war there, it was said that the fires would burn for years, but Safety Boss from Calgary managed to put them out within weeks.

As you have said, the best experience is in the industry itself. We should get the industry and metallurgical engineers together to find a way to contain any accident, regardless of cost, because, as your studies show, the cost can be beyond anything we can accept.

We cannot prevent explosions on a drilling rig a mile above where you are drilling, but you have to prevent the oil from escaping. It should not be a question of whether we can do it; we have to do it. The disaster in the gulf is ridiculous. It will be the biggest environmental disaster we have ever seen.

We need something that will stop any kind of a blowout. I am sure that the people who built submarines and ships that carry nuclear materials all over the world and run on nuclear energy and have never had an accident have more expertise than the oil industry would ever have in preventing explosions of materials under high pressure and heat. I do not think it is impossible to do it.

There is an old saying that an ounce of prevention is worth a pound of cure. People like yourself and governments should be exerting pressure, because this is just not acceptable.

Mr. Stewart: Thank you. Your point is well taken.

Senator Dickson: Mr. Stewart, I think I heard you interviewed on CBC over the weekend. I was impressed with the interview. I wanted to remind the chair of how you could add significantly to the nature of our inquiry. I know the chair worked diligently to have you appear. I am more impressed than ever with your knowledge and your presentation.

We have addressed the environment, as have you, since it is your mandate. I want to concentrate on health and safety, particularly safety, of fish. I understand the biomass off the shore of Newfoundland is increasing. Hopefully, the committee will hear soon on this issue from the Department of Fisheries and Oceans.

I am extremely concerned about safety in looking at the Ocean Ranger and Piper Alpha disasters. We also saw the **Westray disaster** if you want to change the issue to mining.

On page 3 of your presentation, you talk about Piper Alpha as you did in your CBC interview as well. You raise the question of the lack of a proper risk assessment model structure. You gave an example on the CBC interview of the modelling done. The major feature not covered was the depth of the water. In other words, we are now drilling in extreme depths, but the modelling done has been in much shallower water. Would you comment further on the modelling done?

Mr. Stewart: Most of the current body of knowledge, particularly in the Arctic, is built upon work throughout the 1970s and 1980s close to shore in shallow water. The Beaufort Shelf has a depth averaging only 30 metres, which is considered shallow-water drilling.

The U.S. has conducted a full-blown risk assessment of the implications of drilling in the offshore. They have a probability model that suggests up to a 40 per cent chance that a spill will

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occur in the Beaufort Sea over the cycle of drilling in that area. They also produced a trajectory of oil spills, the possible magnitude of a disaster, its implications, and what is needed with regard to emergency response personnel to minimize loss of life and evacuate people to hospitals as quickly as possible. These are the sorts of factors we want to think through.

Canada is currently letting deep-water leases that commit oil and gas companies to drill in significant depths within the next five years. However, we have done nothing to update the modelling to determine the human safety or environmental implications of drilling in water. Is the risk of an accident occurring magnified when you consider that we are moving away from land-fast ice onto the permanent ice pack, which moves? The engineering problem is very different when the operating environment is beyond the continental shelf.

My point is that we do not do much risk assessment, if any. What we have done needed to be adapted to these new scenarios when we make the decision obligating industry to drill in these conditions.

Senator Dickson: The House of Commons took the approach that there will be a review of offshore drilling regulations. I follow the newspapers regarding what is occurring in the United States. Politicians sometimes overreact to accede to public opinion.

We do not need to overreact to the extent that oil companies and people who risk their money in them will not have a balanced regulatory regime in Canada. That concerns me and all Canadians engaged in the oil and gas industry.

Returning to your recommendation on page 4 that the alternative is to call a full commission of inquiry, please comment on two things. First, what would be the scope of such a full commission of inquiry? Second, in my experience as a lawyer, regulatory reviews can go on as long as the clock runs. How would you see a regulatory review undertaken in a staged approach to ensure a reasonable degree of assurance to industry that we are putting them out of business?

Mr. Stewart: To answer the second question, the regulatory review has to be time-limited. It cannot go on forever without costing a fortune in legal fees. I suggest six months. If the U.S. can do a regulatory review within six months, we should be able to do it.

There are two issues regarding scope. First, a regulator on the East Coast apparently removed the requirement for relief wells one year ago. Another regulator, the National Energy Board, has shut down its process for conducting a similar review for good reason. This results in a different policy geographically. We believe it is in the public interest for Canadians as well as industry that we have consistent regulations across the country. Therefore, we believe an inquiry should have a national scope.

Second, we have solutions in this country on which we and industry agree. I listed several attempts in our presentation that have been made over the last decade. However, they fell by the wayside because they were unregulated. Nevertheless, they are viable solutions about how to achieve a smarter regulatory process without increasing the overall burden to industry.

The inquiry should have a sufficiently broad scope to cover all questions about whether, where and how we drill. It is currently only focused on the question of how we drill and not the other two questions. The scope of the inquiry has to cover all three questions.

Senator Dickson: I can appreciate that those are the issues that should be covered, but is the fundamental issue relief wells? Someone removed the requirement in some jurisdictions for a relief well. Modelling would take longer than six months.

Mr. Stewart: Yes.

Senator Dickson: Of the issues that should be covered by the inquiry, which regulatory issue is most important? In other words, can it be staged if, for example, I want a decision on the most important issue within three months?

Mr. Stewart: Speaking for WWF, our greatest concerns are at the front end because that is where our regulatory process is the weakest. The questions about whether and where we drill set a precedent for everything that follows. That is the most important areas for an inquiry to focus. However, local communities may disagree and say they think relief wells are important.

I can only give you an answer from our perspective, and we believe an inquiry absolutely has to cover that front end of the process.

Senator Frum: I am curious to understand whether the depth an oil company can go is simply limited by their own technological capability. The Orphan Basin is 8,300 feet below ground, so is that entirely a company's own judgment?

Comment [PR9]: verified

Mr. Stewart: That is right. The deepest, technologically, that rigs can drill to is 12,000 feet. This one is about 8,700 feet. There is a technology limit, but none of that is spelled out in any regulations.

Senator Frum: You asked rhetorically asked Senator Dickson a moment ago why we are not examining the risk factors. Does the WWF have an opinion or a position in terms of the relative safety of shallow versus deep water?

Mr. Stewart: We believe that the farther you get offshore, the deeper the water and the more you go into a frontier environment, the more risky it will inherently be. Therefore, we believe we need to strengthen our regulatory oversight. If we are to be drilling in these areas, there is an increased probability that an accident will occur. Therefore, we need to increase our oversight and risk assessments. We are not doing that.

We are not circumscribing ourselves and saying never drill there. We are saying that, if we will commit companies to drilling there, we better have these solutions worked out before we make such commitments. It does not make sense to do otherwise. That is the nature of our position.

Senator Frum: Do you not yet have a position on a specific depth level?

Mr. Stewart: No.

Senator Frum: Can you illuminate what happens in a jurisdiction like Greenland, for example. Greenland recently accepted bids to drill in Baffin Bay, near the mouth of Lancaster. That will be near where Canada hopes to have a marine conservation area. In that kind of international or bilateral situation, how much influence does our environment ministry have on a decision like that?

Comment [PR10]: please verify

Mr. Stewart: Very little. I will note that the Greenland Disco Island leasing was done very quickly, which is what alarmed everyone. Their process took all of 18 months, from start to finish. They let those leases and are about to start drilling.

In that time, they managed to conduct a strategic environmental assessment, a sort of regional environmental assessment. Frankly, that is much more impressive than what we have documented and done here. They have managed to do something.

I have not fully analyzed their assessment. I do not know whether it is very good, but that decision is one that will affect us. It is in the Labrador current. Moving icebergs are in that area. If oil were spilled from that rig, it would end up in Canadian waters and it would end up along the coast of northern Quebec, and along the coasts of Newfoundland and the Maritimes.

Also, if a spill should happen from the Shell lease off the north slope of Alaska, the oil would end up in Canadian waters, given the way the currents run.

There is a question here about harmonizing the requirements between countries because we are at risk from one another and we should be holding each other up to similar standards. There was an attempt to do that. The Arctic Council established, at least for the Arctic, oil and gas management guidelines. They were released last year. All countries, through a working committee, agreed to those guidelines. They are an international benchmark.

Maybe that is what we need. Instead of comparing ourselves to Norway or the U.S., maybe we need an international benchmark that we all strive to meet, such as what the Arctic Council has put out. Harmonization is very important.

The Chair: Is there not something like that in place? We keep hearing about this group of eight drilling nations that consult four to six times a year and they have a harmonized approach to regulation. Is that not the case?

Mr. Stewart: That is another attempt. I believe they focus most on the "how to drill" piece -- the technology side and how drilling is performed. That is my understanding of their focus.

There are various models out there and they should be encouraged.

The Chair: Is Canada an active member of that group? Does that group have a name, like the Group of 8?

Mr. Stewart: I have heard it referred to as that.

Senator Dickson: Coming back to the scope of whether there were to be an inquiry, you said the "whether," "where" and "how" we drill could be done in six months. I have been reflecting on that, particularly because of what the chair said. From the East Coast perspective, we are drilling there and it is very important to my province and I know to Newfoundland. My mother came from Newfoundland, so I also defend Newfoundland.

My sense is that the priority should be how we drill. I want to report now because, with some certainty, I could get one within six months, if I put the forces to it on how we drill. It would not be a moratorium; go forward. Someone made a decision and it is made, so let us go forward unless someone discovers something in the reasonable, foreseeable future that will change the course of events.

I think the boards in Atlantic Canada are doing an excellent job and I think they and the governments are sincere. The federal government is fulfilling its responsibilities there.

I would like your comments as to whether such an inquiry could be phased. Go to the House of Commons and make a recommendation through the chair that such an inquiry be phased, if they are to move forward.

The first phase is how we drill. The other could go on indefinitely. I was involved 25 years ago. There is a moratorium now, as you know, in George's Bank in Nova Scotia.

Mr. Stewart: We believe both questions are important. No matter what the scope is, you need to circumscribe it to a certain time period. It will swell to fill the available time. We have a huge body of knowledge, so you can cover off in six months the "whether," "where" and "how" we drill. I think the solutions are out there. People have been thinking about this for a long time. However, you could phase it, so you front load it with "how," et cetera.

The Chair: Let me put something on the record. I raised the point of the eight nations; it is actually nine. For the record, I will read from a briefing note we have from the Library of Parliament people. It is under [point 11 on page 2](#) of their document they have given us for this study.

The International Regulators Forum, IRF, is a group of nine regulators of health and safety in the offshore upstream oil and gas industry. The Canada-Nova Scotia Offshore Petroleum Board and Canada-Newfoundland and Labrador Offshore Petroleum Boards are members. The National Energy Board is not.

We will briefly continue with questions, and then we will be terminating in terms of televised coverage.

Senator Massicotte: I am not an industry specialist. Tell me about the risks and consequences in big picture terms, unemotionally. When you read lawyers' report, when they assess risks, they give you a 1 per cent probability of this, 0.1 per cent probability of that, and the consequences are X. I can talk about tar and so on, but what is the risk of an oil spill? You mentioned 40 per cent earlier. That seems to be very high, but 40 per cent is probably a certain consequence and it is probably a different percentage for a different consequence.

Give me some perspective of the risks we are having. If I am the Prime Minister and you gave me a one-paragraph summary, what would that risk be and what are the consequences?

Mr. Stewart: When they do a risk analysis, they present different scenarios. They say a blowout would be worst-case scenario, where we cannot contain the oil, but there are other places where spills could occur. There could simply be a leak or a small accidental spill of material off the side of a ship. There was just a revelation that there was a spill of drilling mud, which is problematic but not as bad

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as oil. There are different types of scenarios where you then assess the risk and the implications of if this happened, what would be the impact?

The worst-case scenario is the one that you typically do all your contingency planning around, because then you have a comprehensive approach.

Senator Massicotte: That is a spill.

Mr. Stewart: That is a blowout and spill, like we are seeing in the Gulf of Mexico. That is the worst-case scenario.

Senator Massicotte: What is the probability of that occurring for the ones we are looking at?

Mr. Stewart: It changes from region to region, depending on weather conditions and how they factor it in. They have sophisticated models, which I do not fully understand, but the probability is very small.

Senator Massicotte: What about the ones we are planning in the Beaufort Sea? What is the risk there?

Mr. Stewart: I do not know the specific number. Their probability was about 12 per cent for very large spills to 40 per cent for very small spills. I think that is the range.

Senator Massicotte: Let us take the 12 per cent. It seems to be high that we would accept that risk. What is the consequence of that, because errors will occur? It is human nature; that is the starting point. What is the consequence economically or environmentally?

Mr. Stewart: There is no commercial fishery in the Beaufort to speak of, so there would not be the economic implication. You are talking more about implications for the environment and the quality of life for the people who live there.

Senator Massicotte: Interpret that for me. If there are only three people living there, I care a lot for them but I care a lot less than if there are 1 million people living there.

Mr. Stewart: There are six Inuvialuit communities around the Beaufort that rely primarily on hunting and harvesting as their main way of life. I do not know the total number of people in that region; it is probably less than 10,000. Their quality of life definitely would be impacted if there was a major blowout and a spill.

We do not know whether we could even contain a well; it would take up to a year to drill a relief well in that situation. We know that oil would gush out under the ice for up to an entire year. You would not be able to clean that oil up. We now know that.

You would have a massive quantity of persistent oil in an ice-covered environment, which would affect the food chain and the animals at the top of that food chain – the mammals that are hunted by subsistence communities in that region. The consequences of such an oil spill would be a dramatically altered way of life for those communities.

Senator Massicotte: Has anyone tried to interpret that?

The Chair: We are off the scope of this hearing. They are not drilling in the Arctic right now.

Senator Massicotte: I appreciate that.

The Chair: We will get into that at another time. If we get into what should be done in the future, we can have a 20-month inquiry. We have four days to do it and we are only concentrating on what they are doing offshore. Do you want to ask about what is going on in Newfoundland, where they are drilling?

Senator Massicotte: You can choose whatever, but at the end of the day, someone will make a decision and say there is a consequence of an oil spill. You have to accept that reality. If you look at the polls, Canadians will say stop it.

The Chair: We are not drilling there. It is stopped.

Senator Massicotte: They are saying stop it forever.

The Chair: That will be for another inquiry. I am trying to show there are or are not dangers of what is going on right now.

Senator Massicotte: There is no drilling so obviously there is no danger.

The Chair: That is why I do not want you to go there. We agreed as a committee not to go there.

Senator Massicotte: There is no risk; there is no drilling.

Mr. Stewart: To reiterate that point, there is no drilling. We have committed to drilling within five years. We need to figure out how to get it right.

Senator Banks: There will be drilling there within five years. There are companies that are committed to drilling within five years.

Mr. Stewart: There will be drilling there by 2014. Imperial Oil is contractually obligated to drill by 2012, but I understand they will receive an extension. The expectation is there will be drilling in the summer of 2014.

The Chair: Thank you very much. Mr. Stewart, you have been tremendous. I think all the senators have had their chance to question you. You have been very forthcoming with your answers and we are grateful to you.

I will terminate this part of the meeting. We will go in camera to discuss our budget and come back live to adopt it, if you wish.

(The committee continued in camera.)

(The committee resumed in public.)

The Chair: Colleagues, we are back on the record to consider the budget that has been prepared and discussed. I think you all have it before you. Senator Banks, I am looking for you to move, subject to the nuclear fact finding being increased to 12 senators without interpreters and the like. We will amend it. Otherwise, are you moving that it be adopted as drawn?

Senator Banks: Yes.

The Chair: It is seconded by Senator Lang. All in favour?

Hon. Senators: Agreed.

The Chair: Is it agreed that I be authorized to go and do what must be done at the Standing Committee on Internal Economy, Budgets and Administration?

Hon. Senators: Agreed.

Senator Banks: And to remind Internal Economy that they are there to serve the Senate. That is their purpose.

Senator Massicotte: Are you proposing an amendment to your resolution?

The Chair: He knows that I will be a faithful emissary.

Thank you very much. We will suspend.

(The committee suspended.)

(The committee resumed.)

The Chair: The meeting is back in session, and I recognize Senator Banks.

Senator Banks: I move that, on behalf of the committee, you undertake to devise and present in the Senate a motion having regard to the examination of regulations governing offshore drilling in Canada, to be written and determined by you in light of all of the things we have heard.

Senator Dickson: I fully agree that you have sole control of the substance of the motion, but I would like you to give consideration to a phased approach if there will be a regulatory review. As I mentioned, we do not want to sterilize the investment process and what is going on on the east coast now. In the first phase, the House of Commons and any review should look at how. Otherwise, we will go down the environmental road, and even though he says you can do it in six months, I think it would be six years and more, because every NGO from here to wherever will find a reason for not drilling.

The Chair: We are on the record, and I am hearing the motion, and I am also hearing Senator Dickson and Senator Banks offering to work with me in putting this motion together to that it will echo largely what was done in the other place yesterday; is that correct?

Senator Banks: That is correct.

The Chair: Are we in favour, colleagues?

Hon. Senators: Agreed.

(The committee adjourned.)