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## **Standing Committee on Natural Resources**

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**EVIDENCE**

**Thursday, June 5, 2014**

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**Chair**

**Mr. Leon Benoit**



## Standing Committee on Natural Resources

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•(0845)

[English]

**The Chair (Mr. Leon Benoit (Vegreville—Wainwright, CPC)):** Good morning everyone.

Before I introduce the witnesses and get on to the business of today's meeting, I would like to ask the committee about a couple of things.

Next Tuesday we're going to do the clause-by-clause study of this bill. Next Thursday we will deal with the summary on rare earths. It was suggested by Ms. Moore that we be prepared, in case we get through clause-by-clause examination early, to start discussing the report on rare earths.

Is that agreeable to everybody here?

**Some hon. members:** Agreed.

**The Chair:** Then the other thing that we need to decide is....

First of all, in case the clause-by-clause study goes longer than the two hours, is it agreed that we go as long as it takes to complete the clause by clause of Bill C-22?

Is that agreed?

**Some hon. members:** Agreed.

**Ms. Christine Moore (Abitibi—Témiscamingue, NDP):** It is, if there are no votes or anything.

**The Chair:** Yes. Well, we never know about votes.

Okay. So that's what we'll do.

The final thing is on the propane study. We should set a deadline for all parties to have their list of witnesses in. That would be happening on Tuesday, June 17.

Could we quickly set a date for all parties to have their witness lists in for the propane study on Tuesday, June 17?

**Hon. Geoff Regan (Halifax West, Lib.):** I would suggest next Wednesday at 5 o'clock.

**The Chair:** Is next Wednesday at 5 agreed?

**Some hon. members:** Agreed.

**The Chair:** Thank you very much.

That's the way we'll proceed with that.

**Ms. Christine Moore:** Did you say Wednesday the fifth?

[Translation]

**Hon. Geoff Regan:** Next Wednesday at 5:00 p.m.

[English]

**Ms. Christine Moore:** I'm sorry, the translation wasn't good. You just told me "Wednesday the five", and I'm saying to myself, "But we are already at the fifth".

So that's great.

**The Chair:** Thank you.

Now we'll get to the business we have before us today.

I want to start by thanking all of the witnesses for being here.

Mr. Labonté, this is two meetings in a row, and we're looking forward to your presentation and your answers to questions by members today.

We are here today to continue our study of Bill C-22, an Act respecting Canada's offshore oil and gas operations, enacting the Nuclear Liability and Compensation Act, repealing the Nuclear Liability Act and making consequential amendments to other Acts.

For the first three-quarters of an hour this morning, we have from the Department of Natural Resources Mr. Jeff Labonté, director general of the energy safety and security branch, energy sector. Again, thank you.

We have Dave McCauley, director of the uranium and radioactive waste division in the electricity resources branch, energy sector. Welcome to you, sir.

And we have Joanne Kellerman, general counsel and executive director, legal services. Thank you for being here today as well.

Go ahead, please, with your presentation. Then we'll get to the questions and comments after that. I look forward to a meeting as productive as the last one.

Go ahead, please.

**Mr. Jeff Labonté (Director General, Energy Safety and Security Branch, Energy Sector, Department of Natural Resources):** Thank you, Mr. Chair and members of the committee. It's a pleasure to be here this morning to speak to you about the second part of Bill C-22. This will focus on nuclear compensation and liability.

[Translation]

This morning, it is my pleasure to provide you with some background about the second portion of this bill.

[English]

A presentation has been circulated. I hope everyone has a copy. As with previous representations, we will try to move through the presentation fairly quickly and open the floor for your questions and comments and will do our very best to respond to those.

The purpose today is to brief on the nuclear components of the energy safety and security act. In essence, the act proposes to amend the nuclear regime to establish greater legal certainty, and enhance liability and compensation procedures, protocols, and aspects related to the unlikely event of a nuclear incident in Canada.

For background, the act will replace our current nuclear liability regime, which is based on a 1976 nuclear liability act. My legal counsel has reminded me that the act was tabled in parliament in 1970 and wasn't in to force until 1976.

To point out a couple things, the act provided for liability limited to \$75 million in the event of a nuclear incident. There are aspects of the act that I think it would be fair to say are outdated and that we would hope to modernize. Certainly it doesn't reflect international standards, nor international conventions that have emerged to manage transboundary and transnational issues related to nuclear incidents in the event that they ever occur. Those are the focal points, to us, in terms of the policy logic for the bill.

I think most committee members may know this, but I'll say it for the record. The bill has been introduced four times before parliament and has not managed to make its way to a vote and to royal assent. That said, I think it's an important piece of legislation that we hope we can help advance, and certainly respond to your questions in a fashion that allows so.

With regard to highlights of the bill, it is really about three things. One is to strengthen compensation and bring it in line with international peers and with other international context. Two is to clarify the compensation definitions and the procedures in which compensation would be provided and how it would be determined. Three is to allow Canada to sign and ratify the International Atomic Energy Agency convention on supplementary compensation for nuclear damage. That is in effect a convention that allows countries to work together to deal with transboundary incidents and to share resources in the event that there's an incident in a member country to the convention.

As well, the bill—similar to the offshore portion of the bill—has elements that are quite consistent with what was proposed in the Commissioner of the Environment and Sustainable Development's fall 2012 report. It looked at liability limits for all of Canada's energy production regimes and natural resource sector areas.

● (0850)

[Translation]

I will now discuss what is found on slide 4 of our presentation.

The nuclear sector is important for Canada's economy. It provides 30,000 direct jobs, of which 5,000 are in the uranium and aluminum sectors, and 25,000 in services and energy production from uranium. In total, over \$6 billion in revenues are produced annually in Canada. This is a major aspect of our economic context as well as development.

[English]

On the fifth page, I'll cover a couple of key elements of the act in terms of highlights. I'm certain you'll have a more deeper look at things, but there are elements of the bill that focus on improving accountability and looking at the liability aspect.

First, the act maintains that liability for operators is exclusive and absolute. Similar to the offshore portion of the bill, that would mean that in the event there were an incident—and we believe that such an incident would be highly unlikely—the operator of the facility would be absolutely liable. There would be no need to provide fault or negligence to demonstrate that liability.

The bill proposes to increase absolute liability to \$1 billion over a period of three years in several steps. It requires that operators have a commensurate amount of insurance or fiscal security that demonstrates they are able to handle the \$1 billion worth of absolute liability. It also provides that the government will provide coverage where there is no insurance, and there are several instances where we might find that in this part of our economic sector. One example is small reactors or reactors that relate to research areas. The second example is in areas where the insurance community is not prepared to look at 30-year horizons, for example, for coverage of certain damages.

The act also provides a mandated review of liability amounts every five years so that at least Parliament will have the opportunity every five years to increase the amounts of liability and compensation that are fundamental in the act.

The second part or theme of the bill is really to look at increasing the response capability, so the bill goes quite a ways in expanding the definition of categories of what are the compensable damages. It provides for a limitation period and expansion for bodily injury for claims from 10 years to 30. It provides the compensation of remedial measures to repair and to deal with environmental damages and it establishes authorities to simplify the claims-handling process through a tribunal, should it ever be necessary.

It also allows Canada to enhance its transparency and to join the international community, so the bill provides for Canada to ratify membership in the convention on supplemental compensation for nuclear damage. Once in force, this convention will provide certainty for liability in jurisdictions for trans-boundary and trans-national issues. It specifies how these issues will be dealt with. It provides supplemental coverage should Canada ever need it and it provides that Canada would also contribute to supplemental coverage from another member country, should it ever be needed as well.

In terms of next steps for the bill, it was introduced on the 30th of January. Following royal assent and entry into force, part 2 requires a number of regulations to be established, and we expect to do those in the coming months and, over the next 12 to 18 months, one regulation is to provide for an insurance policy and another is to establish the definition of a nuclear installation.

Once it has come into force, Canada will then formally complete its process to ratify the convention. So we've signed the convention, but it isn't formally ratified until the policy is in place domestically in law and several regulations are in place, and then we're able to actually ratify the convention and become formal members of it. So there are several steps along the path that gets us to being a member. The annex includes the acts that will be amended either directly or consequentially through this process.

Thank you, Mr. Chair.

• (0855)

**The Chair:** Thank you very much for your presentation, Mr. Labonté.

We go now to questions, the seven-minute rounds, starting with Ms. Crockatt.

Go ahead, please, for up to seven minutes.

**Ms. Joan Crockatt (Calgary Centre, CPC):** Thank you very much, Mr. Chair.

Good morning to the departmental officials. It's nice to see you again, although it feels like it's only been a few hours.

We're now into the nuclear portion of this bill. Thanks for your presentation this morning. I'm wondering if you can just outline sort of on a big-picture basis the policy objectives of this bill and why the legislation raises our operator liability to \$1 billion.

**Mr. Jeff Labonté:** From a big-picture point of view, it's partly related to the age of the current act that we work under and the limit that's provided at \$75 million. The bill really focuses on raising that to be consistent with what would be expected of a nuclear regime, something that's consistent with holding accountable the operators of those installations across the country, recognizing that there is an insurance community that supports those operations and that there's a balance between having a liability amount that's reasoned and one that's economically viable in trying to manage what the cost structures would be and how the insurance would work.

If we look also from a broad perspective, countries around the world that have nuclear facilities and nuclear operations as we do in Canada, predominantly for energy generation, have a range of different liability limits. They range from \$100 million in Norway and in France, to \$500 million in the Netherlands, to \$1.2 billion in Switzerland. So Canada's view of putting \$1 billion and making it absolute puts us squarely among the leading countries and is certainly an amount that we think is appropriate given the context that we have here in Canada.

**Ms. Joan Crockatt:** Is the public aware of those liability limits? Is this so the public can be assured that the industry is operating in that accountable framework, or is it more so that the government has that level of assurance, or is it both?

**Mr. Jeff Labonté:** I suggest it would be both. I think Canadians in general are committed to the view that operators of industrial activities with an element of risk associated with them ought to be prepared for incidents and accidents, through the design and the operations of their industrial activity, their emergency plans, and all the prep they do in the event something happens, and then the work they do to prevent it.

At the same time from a government perspective, there needs to be an assurance that the operators of these facilities have the resources and are able to deal with them from a financial point of view. And then there needs to be a regulatory system that requires them to have the plans, to exercise the plans, to demonstrate to the satisfaction of the regulator who's independent of government that they're prepared, that they've done everything they can to mitigate and prevent things. Most Canadians are not fully aware of the number of dollars involved, but I think their expectations are pretty straightforward. They expect people to be ready, to take every action possible to avoid things, and to be prepared to deal with incidents should they ever arise.

**Ms. Joan Crockatt:** You mentioned that this bill has been introduced four times before. Did you calculate how many hours of debate it's had to date?

**Mr. Jeff Labonté:** I'll take the fifth on that.

**Ms. Joan Crockatt:** You have better things to do with your time?

**Mr. Jeff Labonté:** I think it's been to committee twice. There's a positive side to that, which is that it's had a lot of consultation, a lot of discussion and debate, and a lot of comments.

And we've advanced the bill each time, so there are changes in this bill that weren't included in the previous bill. I can cover those if you wish, but it's had a number of laps around the track, if you will.

**Ms. Joan Crockatt:** Since you raised it, what is in this bill that was not in previous bills? Is it a stronger bill than previously?

• (0900)

**Mr. Jeff Labonté:** From a policy perspective, the department would certainly feel that it was a stronger bill. The previous version of the bill limited the liability to \$650 million, whereas this bill puts it at \$1 billion, so there's a fairly sizeable change. This bill has that liability phased in over time, which is responsive to what some of the stakeholders felt was the need over time to be able to get into the insurance market, to get the insurance required, and to put the fiscal elements in place they would want. That's moving from \$75 million to \$1 billion over a three-year horizon, starting at \$650 million, moving to \$750 million, \$850 million, and then to \$1 billion.

Bill C-22 also more clearly defines psychological trauma, one of the damages that is compensable under the bill, and how that would work over time and how it's associated with bodily injury. It was less clear in the previous versions of the bill. So the longer we officials have had to look at a bill, the longer we have had to try to optimize and refine it to provide as much clarity as possible. As you're parliamentarians, I'm sure you're trying to do the same thing, but time always limits the ability for you to look at everything as much as you can.

Bill C-22 makes explicit that the costs incurred by authorities in responding to an incident are not compensable by the operator. For example, if emergency services of fire, police, or whatnot responded to a potential incident, those costs are not reimbursable to the municipality or the province responsible. They're covered via the emergency services of that particular part of the country.

**Ms. Joan Crockatt:** Whenever we're placing an additional burden on industry, we always want to know what the impact is going to be on the consumer, so I'm wondering if you can tell us what the impact will be. Are you expecting premium increases on electricity for homeowners?

**Mr. Jeff Labonté:** We expect that the change of the liability amount to \$1 billion will substantially change the premiums in the insurance market for the operators. There are only three operators of nuclear facilities in the country that'll be seeking insurance, so the number of operators is small and the community of insurers is small and has to be approved. Under the bill the Minister of Natural Resources has to approve an insurance policy to make sure it's consistent with the act.

So there is going to be a premium increase. We expect it to be about five to eight times what is paid today. In Ontario, where there are the most number of reactors, that is expected to translate to about \$2 per year for the average ratepayer.

**Ms. Joan Crockatt:** That's not five to eight times the electricity cost. The premium would be five to eight times what it is, basically.

**Mr. Jeff Labonté:** The insurance premium would be five to eight times what it is today.

**Ms. Joan Crockatt:** That's \$2 per year?

**Mr. Jeff Labonté:** It's \$2 per year per household, based on an average consumption. We don't have specifics on every household, but we kind of modelled the average over time.

**Ms. Joan Crockatt:** Thank you.

**The Chair:** Thank you, Ms. Crockatt.

We go now to the official opposition, to Ms. Moore, for up to seven minutes.

Go ahead, please.

[*Translation*]

**Ms. Christine Moore:** Thank you very much, Mr. Chair.

Mr. Labonté, as you know, disasters like those we saw in Fukushima, Three Mile Island and Chernobyl happen from time to time, despite the fact that these are very unexpected and unfortunate events. That is an undeniable fact. Such situations place the environment and public health at risk. In short, the repercussions are huge. Taxpayers may be liable for these repercussions for decades to come. Here in Canada, we have been very lucky so far.

I would like to hear about the worst case scenario you have imagined that could take place in Canada. What are the potential costs of such an accident in the worst case scenario? Do you know how much the three greatest global catastrophes cost, those being Fukushima, Three Mile Island and Chernobyl? Could you also provide us with information as to whether we have had accidents or near misses here in Canada?

• (0905)

**Mr. Jeff Labonté:** Thank you for your question.

I think your comment contains a few sub-questions. I would like to answer by making several points.

There certainly is a risk of accidents happening in the nuclear sector. The risks are there and it's always a possibility. However, we think the probability is very low. At the same time, we need a compensation system and legislation to protect citizens as well as every aspect of our economic activity, the environment and public health.

In developing Bill C-22, we have had many discussions with various stakeholders and with the population. We have imagined scenarios that could lead to an accident in Canada, taking into account our nuclear reactor's model, system and context.

With your permission, I will carry on in English.

[*English*]

We modelled the context—and certainly it was done a number of years ago—such that the design of the reactor and the situation provide for an incident contained within the design parameters and within the structures of the reactor. Procedures are built into the engineering to provide for things to shut down or to happen, and there are backup procedures and backups to backups that limit the potential for an incident to escalate into a more substantial incident.

The modelling looked at a scenario in which an incident would be contained within a nuclear facility. It also looked at a number of different contexts, one in

[*Translation*]

Gentilly, in Quebec, and another one here in Ontario, where there are reactors. In such cases, I believe the scenario would amount to \$100 million, which includes costs and expenditures from an accident that would take place in the context of developing or installing a reactor.

[*English*]

In that context, it was believed to be in the order of about \$100 million. The modelling did not model the scenario of a Fukushima or a Chernobyl, being that these are a very, very low probability and, if you will, very unique circumstances. In each of those, it hasn't been something that we've looked at in terms of trying to design a system to protect against those types of incidents.

In the case of Fukushima, I believe the cost of the Fukushima accident is in the order of \$30 billion at this point and is expected to be much more as it goes on. It's a running total, if you will. In the Chernobyl case, I'm not sure of the figures for that one. It is not one in which the countries involved have been as transparent about the cost structures.

I think you had a third reference. Three Mile Island? For Three Mile Island in the United States, I'll have to get back to you on the exact numbers of that particular incident, although it's not considered a severe incident, if I could use language of that sort. There was one in the United Kingdom in the 1950s that was a bit more substantial in terms of an incident in which there was a release of radiation.

For the three examples that you have posed, certainly we can get back to you with the numbers, if you wish. On the design scenarios around the Canadian context, our colleagues at the Canadian Nuclear Safety Commission would have done and have done some modelling work also, and some work in terms of incidents, and may be able to provide further evidence and further information to you in response to your question.

[*Translation*]

**Ms. Christine Moore:** Thank you.

I am indeed interested in seeing their modelling.

In Bill C-22, absolute liability is set at \$1 billion. You mentioned scenarios that you had analysed, but those are not the worst case scenarios that could take place.

I know nuclear safety is very, very important in Canada and that it appears very unlikely for an accident to happen. However, the fact remains that such an accident would be quite costly. How can we ensure that taxpayers do not end up footing the bill?

• (0910)

[*English*]

**Mr. Jeff Labonté:** I think that's an important question, in the sense that the majority of the system begins with the design, implementation, build, and operation of the system, and the regulatory approach to ensuring the system is regularly developed, tested, and mitigated. On the work that goes in, there's a fairly substantial amount of work that goes in to protect taxpayers, to ensure that the system is designed well. There are prevention measures. There are exercises that are tested. There are a number of procedures in place that would prevent the worst case from ever even being possible. That's the most important point of all of the dollars invested in the investment of prevention and preparing for the possibility.

On the next step, you're right. The bill proposes \$1 billion in absolute liability. That is a cap. It's a limit; there is a limit to \$1 billion for the operators. The bill provides that should an incident ever appear to approach the \$1 billion, or exceed the \$1 billion, the Minister of Natural Resources would be obligated to bring to Parliament a report that outlines what said costs would be or what they're proposed to be, so that Parliament would be in a position to discuss and debate what response, if any, the government would choose to consider and invoke.

That said, I think it's important to point out that there are only three nuclear operators in Canada. Two of those operators are crown agencies. In other words, they're agencies for provincial governments. In fact, there are three, if we count Gentilly and Hydro-Québec in Quebec, although that particular facility is not operating right now. Also, there's one private operator, but in all instances, the reactors are owned by crown agencies.

There's an element of—how would I put it?—interaction between ownership of the reactors themselves, the operations of those reactors, and then the federal and provincial governments, in which you see an interaction between the law and the regulatory environment that's federal, and yet they're owned, operated, developed, and produced in provincial jurisdictions. There's an element of relationship between governments and between certainly

how one would hold and deal with an incident should it ever exceed—which we don't expect it ever would, heaven forbid—the billion-dollar absolute liability amount.

**The Chair:** Thank you, Ms. Moore.

Mr. Regan, you have up to seven minutes, please.

**Hon. Geoff Regan:** Thank you, Mr. Chairman.

Mr. Labonté, I don't recall if it was you before the committee when the previous iteration of the bill came here a couple of years ago, but as I recall, the officials told the committee that the \$650 million in the bill, which was the absolute liability limit set at that point, was going to be more than adequate, and that a move to \$1 billion would cause problems.

What changed?

**Mr. Jeff Labonté:** Time: I think the bill was here before committee four years ago, it might have been.

**Hon. Geoff Regan:** I don't recall exactly either.

**Mr. Jeff Labonté:** I wasn't the official, but I do believe it was four years ago.

In that time, we have had the chance to conduct further consultations and discussions with the insurance community, the operator community, and the global community. The movement has emerged globally, I think, in the insurance markets. I'm not an insurance market specialist, but our discussions have certainly provided us with confidence that the insurance market's ability and capacity to insure these activities is broadening, and is bigger than it was.

**Hon. Geoff Regan:** If there are already countries where the absolute liability limit is \$1 billion, and obviously there are insurers providing that kind of coverage, why is there a need to have a three-year staged process at that level here?

**Mr. Jeff Labonté:** Actually, I don't want to mislead the committee. It's probably worth pointing out that there are only three or four countries that have over \$1 billion. In fact, the European Union is in the process of moving to \$1 billion overall; so it's a staged period of time.

The trend is that all of the global community is moving. Much of that, I think, is partly in response to better understanding and partly in response to growing and healthy insurance markets, which kind of move with economic cycles. It's also to be certain that their community is, if you will, changing the dynamic, and that's a factor of markets.

So there are a couple, for sure. There is an insurance community right now under the current act. That's the Canadian nuclear insurance association, the United States, the U.K., and another in Europe; so there are only four pools of insurance that we would accept as reasoned within the context of our act. There is a limited number, but those pools are made up of larger insurance companies that are globally based and have the assets and the segregation and the appropriate financial instruments to support the policies they have.

•(0915)

**Hon. Geoff Regan:** I think you're aware that in our second hour at committee on Tuesday, one of the witnesses was William Amos of Ecojustice.

**Mr. Jeff Labonté:** Indeed.

**Hon. Geoff Regan:** He recommended a number of amendments to Bill C-22. One of them called for the bill to give cabinet the ability to make regulations for the calculation of non-use environmental damages.

**Mr. Jeff Labonté:** Correct.

**Hon. Geoff Regan:** If the bill were to be amended to address this shortcoming, what specific clause or clauses would have to be amended?

**Mr. Jeff Labonté:** I'll have to defer to my legal expert, who might be able to provide that to you.

Generally, I think, his proposal was that there be a regulation-making authority that would follow passage of the bill, that would enunciate the value of a coastline, the value of a species, the value of a habitat, and enunciate how one would calculate a cost to return, or the impact to society. The very difficulty with environmental damages is that they're typically called "non-use" value. They're typically things you can't buy or sell. A fairly rigorous determination would need to be done up front and a number of factors would have to go into that.

My counsel can speak to where we would change, but I think the logic behind it was that in the event that it was necessary, given that once you put the regulations in place they need to be regularly updated, the courts are better served to look at the evidence base and to provide a role to determine what the value would be to the crown and to society more generally.

**The Chair:** Ms. Kellerman, can you answer the specific question that was asked?

**Ms. Joanne Kellerman (General Counsel and Executive Director, Legal Services, Department of Natural Resources):** Proposed section 14 provides that "damage to property" is a compensable head of damage under this legislation. Non-use value is in fact a form of damage to property. It's damage to the property of the crown, whether it's the provincial crown or the federal crown.

Proposed section 18 deals with the reasonable costs of remedial measures to repair, reduce, or mitigate "environmental damage".

Again, within Canada, in proposed section 18, and then in states outside Canada, they are both compensable heads of damage. The restriction is that the remedial measure has to be ordered by a competent authority.

While I did not hear Mr. Amos' intervention, I think I'm familiar with the general point he is making. My response would be that the bill you have before you does contemplate that a remedial measure for environmental harm is a compensable head of damage, both within Canada and outside Canada.

**Hon. Geoff Regan:** I'm not necessarily sure that Mr. Amos' prescription is the right way to go. But the notion that people should

have to go to court and let the courts figure these things out is, at least for most Canadians, unattainable. It's unaffordable.

So I guess the question is this: is there no other approach to deal with this problem, rather than to say let the courts figure it out, when most Canadians can't afford to go to court? They can't afford to spend thousands and thousands of dollars on lawyers.

**Mr. Jeff Labonté:** I appreciate that point. The bill actually provides for only an attorney general from a provincial government or an attorney general with the federal government to bring forward the case to court. Individual Canadians would not be expected to, nor would they be able to bring forward said case to court. It would be the crown on behalf of Canadians that would make that determination, recognizing your point about—

•(0920)

**Hon. Geoff Regan:** Access.

**Mr. Jeff Labonté:** —access, as well as whether you wanted multiple iterations of the same action being brought forward and having challenges of traffic management, if you will, in courts.

**Hon. Geoff Regan:** I'll go on to my next question.

**The Chair:** Thank you, Mr. Regan.

**Hon. Geoff Regan:** I would go on to my next question.

**The Chair:** Your time is up.

We go now to the five-minute round, starting with Mr. Trost, followed by Ms. Block and then Mr. Rankin.

Go ahead, please, Mr. Trost, up to five minutes.

**Mr. Brad Trost (Saskatoon—Humboldt, CPC):** Thank you, Mr. Chair.

As, I believe, the only member of the committee when this portion of the bill was originally introduced, I'm very much looking forward to it finally getting passed. There's a rumour I can't get off this committee until it finally gets passed.

One of the aspects you pointed out of why this bill needed to be ratified has to do with the Convention on Supplementary Compensation for Nuclear Damage. Could you elaborate on, one, why that is important for Canada to ratify, and two, how that helps to protect Canadians in the event of accidents not in our jurisdiction?

**Mr. Jeff Labonté:** I'll address this broadly, and then turn to my colleagues.

Broadly, joining the international convention provides us more protection in the sense that there's a community of countries that have similar circumstances and basically have the same frameworks. So it provides legal certainty.

More specifically, the United States is a signatory to that convention, one of the charter signatories. Today it's fair to say that both Canada and the United States have nuclear facilities. Many of those are near the border. There is the potential—albeit, as we think or believe, pretty remote—that an incident could be transboundary.



Absent being a member of the convention, there is no treaty, no workable framework with the United States on how to deal with something that might originate in either country and impact the other. Joining the convention, and the convention coming into force, will allow us to have a treaty with the United States that deals with certainty of jurisdiction, certainty on how to deal with damages, and certainty on how to deal with what kinds of issues might arise.

I could certainly turn to Dave first, perhaps, and then Joanne next, to add to your question in terms of what other benefits would come.

**The Chair:** Go ahead, Mr. McCauley.

**Mr. Dave McCauley (Director, Uranium and Radioactive Waste Division, Electricity Resources Branch, Energy Sector, Department of Natural Resources):** Thank you very much.

I think Mr. Labonté has covered it off fairly well. The key elements would be that it clarifies jurisdiction, which operator is liable in the event of damage that was transboundary or in a transportation incident. The convention also has a public fund associated with it, which brings additional compensation to a member country in the event of an incident. And third, by virtue of the fact that countries come together globally to enter into a convention like this, it enhances nuclear safety by allowing more flexibility for international contractors to do work in different jurisdictions.

**Mr. Brad Trost:** To extend on that point, how does it allow our contractors, our industry to go do more work? Explain that a little more fully.

**Mr. Dave McCauley:** Certainly. By virtue of the fact that we are members of a treaty, a convention with another country, that member country accepts the terms of jurisdiction, the same rules of liability that we do. So it makes it easier for our contractors or contractors in other countries to do work across boundary.

**Mr. Brad Trost:** I understand the positives behind this. But is there some risk that, in some respects, we could lose rights, if there were an accident on the U.S. side?

You're stating that it provides greater certainty. But the legends about American trial lawyers and what they can get, and so forth, are out there. If somebody wanted to go and sue in the United States, would this limit the ability of Canadian citizens to utilize the American courts in the event there was an accident on the U.S. side that affected Canada? Would it stop Canadians from suing in the States?

**Mr. Jeff Labonté:** It doesn't, so it would provide that the U.S. had jurisdiction and it would provide, under the terms of the convention, that compensation would be non-discriminatory so that Canadians would have a right to compensation equal to that which Americans have based on the damages that may have been occurred and they might have been subject to.

**Mr. Brad Trost:** And what advantages or what protections would accrue to the United States? I'm assuming these would be identical, but could we be exposed to more costs if we had a Canadian accident that the Americans would come for?

**Mr. Jeff Labonté:** The reverse is true. So Canada would have jurisdiction. Americans would have to seek compensation through

Canadian systems and we'd be limited to Canadian systems and limited within the damage liability framework—

• (0925)

**Mr. Brad Trost:** The Canadian law would still—

**Mr. Jeff Labonté:** It would apply. So one part of the treaty is the quid pro quo, if you will.

**The Chair:** Thank you, Mr. Trost.

We go now to the Parliamentary Secretary to the Minister of Natural Resources, Ms. Block, for up to five minutes, please.

**Mrs. Kelly Block (Saskatoon—Rosetown—Biggar, CPC):** Thank you very much, Mr. Chair.

Welcome back to committee. It's good to have you here. I appreciate your testimony and the work that has been done on this legislation. As my colleague pointed out, we defer to folks who have been here much longer than I and other newer members have been, because as Mr. Trost pointed out this legislation has been before this committee at least four times. We're discussing it now for the fifth time.

So thank you very much.

My first question has to do with the liability amount. I'm wondering if you could tell me the precise phase-in period for the dollar amounts and the years.

**Mr. Jeff Labonté:** Dave, could you take this question?

**Mr. Dave McCauley:** Certainly. Thank you very much for the question.

On proclamation of the act, the amount of liability would be \$650 million. One year after that date, it would rise to \$750 million. Two years after the date of proclamation it would rise to \$850 million, and then three years after the date of proclamation, it would rise to a billion dollars.

**Mrs. Kelly Block:** Thank you very much.

I'm also interested in knowing a little bit more about the types of damage that will be compensated under the new legislation. Could you go through that for me as well.

**Ms. Joanne Kellerman:** The legislation provides in clause 14 that bodily injury, death, and damage to property are compensable, and then in clause 15 it's more precise than I think the previous version of the bill that the committee saw was. It provides that psychological trauma will be compensable when it arises from bodily injury of an individual. So if there is a physical injury that then gives rise to psychological trauma, it's compensable. There are also more specific provisions in relation to economic loss, that being time off work, for example, and loss of salary arising from a personal injury, a bodily injury. Economic loss that arises from property damage is compensable.

**Mrs. Kelly Block:** I know you have referenced the limitation periods for making claims and I'm wondering if you could just provide us with a little bit more information about the limitation periods.

**Mr. Jeff Labonté:** Certainly.

The limitation period in the current act is 10 years. The proposed act before us would increase the limitation period for making claims for bodily injury and death to 30 years from the current 10 years. In the event of an incident, a person could make a claim for damages related to bodily injury or death up to 30 years after the incident, which is what is seen to be the period of time, in the event of exposure, of a rare instance, during which some illnesses may take form and be resident and be able to be detected. So it's in that instance that the period of time is extended.

**Mrs. Kelly Block:** Okay. Thank you.

**The Chair:** You still have a minute, Ms. Block.

**Mrs. Kelly Block:** Can you tell me a little bit about the consultation and whether there was more recent consultation that helped to inform some of the most recent changes to this legislation?

**Mr. Dave McCauley:** Thank you very much.

Yes, this bill has undergone quite a bit of consultation since it was first introduced, of course, in an earlier form.

Most recently, however, and as Mr. Labonté indicated, because the bill has been before committee twice previously, we've been able to benefit from the comments that have been made by committee members and witnesses on the bill, and that's gone into, I think, building a stronger piece of legislation.

Also, in 2012, the department issued a consultation paper on how the bill might be updated, putting the issue specifically on the operator liability and what would appear reasonable and appropriate for increasing that liability. That was one of the key reasons moving us to the \$1 billion consideration.

• (0930)

**The Chair:** Thank you, Ms. Block.

Finally to Mr. Rankin for four minutes.

**Mr. Murray Rankin (Victoria, NDP):** Thank you, Chair.

Thank you, witnesses.

Mr. Labonté, in the big picture, the trend through environmental legislation over the last few years has been that the polluter pays and internalization to the person causing the harm. In my province of British Columbia, we have joint and several retroactive, absolute liability for contaminated sites. Chemical manufacturers internalize all of their costs if there's an accident.

So in the big picture, why is the nuclear industry getting a break from that normal regime, the notion of entire internalization to the industry?

**Mr. Jeff Labonté:** I appreciate the question, and certainly the polluter-pay principle exists in common law and it's resident, I think, in a number of different pieces of legislation.

In the particular instance here, the context around polluter pays is one in which there seemed to be a limit to which the community could operate, and that limit is not constrained in a Canadian context but is a global issue. Certainly, the aspects of the bill demonstrate that the polluter will pay and the polluter will be held accountable.

**Mr. Murray Rankin:** But only to a cap of \$1 billion.

**Mr. Jeff Labonté:** To the extent that the law provides, correct. Of course, I would again reinforce that ultimately the owners of the reactors in Canada, and the ownership of the reactors are taxpayers to put it as bluntly—

**Mr. Murray Rankin:** But that only applies at present. In the future this would cover private operators that may exist 10 years from now, correct?

**Mr. Jeff Labonté:** They could, but I think it would be fair to say that the design and development and build of a nuclear facility 10 years from now would probably be starting the regulatory phase now.

**Mr. Murray Rankin:** But I'm just saying in principle that we can have private operators. We do have one, and we can have more. Is that not correct?

**Mr. Jeff Labonté:** We have a private operator of a publicly owned facility, so certainly there's an operator who operates a publicly owned facility, and I grant your point that there could be the possibility of a privately owned and developed facility in Canada.

**Mr. Murray Rankin:** I don't know the answer to this, but I'm advised that the United States Price-Anderson Act on nuclear liability contemplates an insurance pool, which is now at \$12 billion U.S., or about \$13.25 billion Canadian. Is that correct?

**Mr. Jeff Labonté:** Mostly. The United States has a limit to liability for each operator of about, I think, \$375 million. If there is an incident that exceeds that amount, which is, if you will, the polluter pay cap in the United States of \$375 million, then all of the other reactor owners contribute to a pooled fund that at this point would push about \$12-plus billion.

**Mr. Murray Rankin:** In your very helpful slide presentation, you mentioned the \$1 billion liability, and then below it you say that the act maintains government coverage for impacts where there is no insurance.

**Mr. Jeff Labonté:** Correct.

**Mr. Murray Rankin:** Then it goes on to say that the increasing response capability provides for compensation of costs of remedial measures to repair environmental damages.

I just don't understand those two thoughts. There's \$1 billion and then there's a government pool in addition, is that what that means?

**Mr. Jeff Labonté:** No. There's \$1 billion that's required of operators. The regulation phase that follows passage of the bill will identify nuclear installations. There are different types.

A reactor that generates electricity will be one type and there would be an expectation of \$1 billion. There are research reactors in universities across the country that are quite small, that are quite different than, say, electricity generation. In those instances, their ability to find \$1 billion worth of insurance coverage doesn't exist.

The government will provide coverage for those research communities and then have a fund in which they contribute a premium to offset that particular aspect. So there are a couple of instances.

There's another instance where it's likely that the insurance community will not cover the 10 to 30-year change in bodily injury. So the government will have to contemplate that in an insurance process.

So there are two stages to the regulatory phase: one, to set up the classes; and two, to put applicable insurance in place as an approved policy, if you will. That discussion is under way with the insurance community.

To answer an earlier question from one of the members, we were actually consulting with them a few weeks ago. There is an element that the government may have to provide a portion if you will.

• (0935)

**The Chair:** I'm going to ask one final question if I may.

If the situation were to change, where we had a private nuclear reactor owner and operator in Canada, first of all, is it fair to say the legislation would be changed to accommodate that?

Secondly, is it fair to say that there would be a lot of lead time because it takes a lot of time to go through the regulatory process and to build a nuclear reactor of any kind?

**Mr. Jeff Labonté:** I can't comment on the will of Parliament in the future except to say that the lead time to build a new reactor in Canada would be extensive. My colleagues in the regulatory community could probably tell you that they would do their very best to move it along as quickly as they could, but given the design and the development, we're talking about likely a decade or so.

**The Chair:** Thank you very much for being here again, Mr. Labonté, Mr. McCauley, and Ms. Kellerman.

We very much appreciate your being here and giving us information to help us deal with this important piece of legislation.

I'll suspend the meeting for just a couple of minutes as we go to our next panel of witnesses. We'll come back for the rest of the meeting and question those witnesses.

• (0935)

(Pause)

• (0940)

**The Chair:** Good morning everyone. We continue our study of Bill C-22.

We have with us for the second part of our meeting three witnesses.

We have, first of all, from the Canadian Nuclear Association, Dr. John Barrett, president and chief executive officer. Welcome to you, sir. Thank you for being here on such short notice.

We have from Greenpeace Canada, Shawn-Patrick Stensil, nuclear analyst. Welcome to you, sir.

We have from the Canadian Nuclear Safety Commission, Dr. Michael Binder, president and chief executive officer. Welcome to you, sir.

We'll go ahead with presentations. We've asked you to limit them to five minutes, so that we have ample time for questions and comments from members.

We'll go in the order that you are listed on the agenda, starting with Dr. Barrett from the Canadian Nuclear Association.

Please, go ahead, sir.

**Dr. John Barrett (President and Chief Executive Officer, Canadian Nuclear Association):** Thank you, Mr. Chair, and thanks to the members of the committee for inviting me to appear on behalf of the Canadian nuclear industry.

The Canadian Nuclear Association is a non-profit organization established in 1960 to represent the nuclear industry in Canada. The association promotes the development and growth of nuclear technologies for peaceful purposes. It represents the nuclear spectrum from uranium mining to waste management and all the points in between.

The Canadian nuclear industry provides isotopes that improve cancer diagnostics and therapies, imaging that improves manufacturing quality, electricity that avoids greenhouse gas emissions that in turn drive climate change. Through these activities, the Canadian nuclear industry directly employs 30,000 Canadians and another 30,000 Canadians indirectly through our suppliers.

According to the Canadian Manufacturers and Exporters association, the industry generates nearly \$7 billion of economic activity, exports \$1.2 billion in goods and services, and pays \$1.5 billion in federal and provincial taxes. In all of our activities, our business is safety. It is inextricably and permeates our corporate culture.

Nuclear power plant operators hold an enviable safety record highly regarded by employees, by host communities, and nuclear industry globally. We are proud of the fact that there has never been a claim under the Nuclear Liability Act. We are determined to see that none will ever occur under the proposed Nuclear Liability and Compensation Act. Our industry supports the passage of Bill C-22. This legislation would improve the nuclear liability framework, bringing it in line with international standards. It would protect Canadians and improve the industry's ability to manage risk responsibly.

With the passage of the Nuclear Liability Act in 1976, our industry accepted the principles of absolute and exclusive operator liability, mandatory financial security, and liability limitations in time and amount. These principles are standard features of nuclear legislation in the United States, Europe, and elsewhere.

Bill C-22 adequately balances the needs of industry and the needs of Canadians. In updating the 1976 legislation, Parliament would bring Canada in line with modern international standards and our members appreciate the government's flexibility in proposing financial instruments as insurance alternatives.

Moreover, the nuclear industry strongly supports the ratification of the Convention on Supplementary Compensation. This treaty already ratified by the United States will provide further protection in the case of an international incident. It will also improve the industry's ability to export Canada's significant nuclear expertise.

There are significant global opportunities presented by the current construction of 71 nuclear reactors in the world, including five in the United States and 20 in China. Canada enjoys an enviable international reputation as a nuclear pioneer and global leader in technological innovation and regulatory effectiveness.

Mr. Chair, we support the provisions of this proposed legislation and we urge Parliamentarians to pass it into law. With that said, there are two points that deserve the government's attention. The first is we would urge the Minister to use his authority to increase the number of eligible insurers. Our members face a substantial increase in premiums and would appreciate the benefits of open and fair competition in the insurance market. The government's recent actions have ended a long running monopoly, but greater competition will be needed when this bill is proclaimed.

Second, we seek clarification of the term "nuclear installation". We detect a difference between the interpretation provided in the bill and that provided in the backgrounder that accompanies the bill. In the backgrounder, nuclear installations are defined as "Canadian nuclear facilities such as nuclear power plants, nuclear research reactors, fuel processing plants and facilities for managing used nuclear fuel". In the bill however, the definition of nuclear installation is potentially much broader. If the backgrounder is correct in identifying only these four types of installations, then the legislation should be made equally clear.

• (0945)

In summary, Mr. Chair and committee members, the Canadian nuclear industry supports this bill just as we have supported the government's previous efforts to amend the Nuclear Liability Act. These amendments, long overdue, would bring Canada's nuclear liability regime in line with international standards.

We encourage you and your colleagues to pass this legislation with the improvements that we have recommended.

Thank you very much, Mr. Chair.

**The Chair:** Thank you very much, Mr. Barrett, for your presentation. It is much appreciated.

We go now to Shawn-Patrick Stensil from Greenpeace Canada.

Go ahead, sir, with your presentation for up to five minutes.

**Mr. Shawn-Patrick Stensil (Nuclear Analyst, Greenpeace Canada):** Thank you for this opportunity to give Greenpeace's views and recommendations on the proposed nuclear liability and compensation act contained in Bill C-22.

[Translation]

I will make my presentation in English, but I will be pleased to answer your questions in French.

[English]

While listening to the debate on Bill C-22 during second reading, I heard from the opposition parties that they viewed this bill as a step forward but with important flaws. They hoped that the bill could be improved upon and the flaws addressed at committee.

I didn't hear from the government that they were opposed to improving the bill.

In my presentation to you, I will provide four recommendations on how to improve Bill C-22. These recommendations are reasonable and based on precedent.

First is international best practices, which I hope the Canadian government would be striving to meet. Second is modern principles of Canadian law and jurisprudence; specifically the inclusion of the polluter pays principle.

There are two key reasons that the bill should be amended. It increases the risk to the public and to the taxpayer.

The Fukushima disaster had yet to occur when Parliament last debated this bill, so the context has changed. In Greenpeace's view, this new version of the NLCA does not take into account lessons learned from Fukushima. We're now seeing major nuclear accidents, somewhere in the world, about once a decade. This regular occurrence of nuclear accidents was not what the nuclear industry predicted when Parliament passed the original Nuclear Liability Act in the 1970s. Three Mile Island, Chernobyl, and Fukushima all have a common cause and it has nothing to do with engineering. These accidents were caused by humans and companies, corporate entities, failing to put public safety first.

In a post-Fukushima world, where we know that nuclear accidents are caused by irresponsible companies, does it make sense for the Canadian government to increase the protection given to the nuclear industry at the expense of public safety? From a public interest perspective, I think the answer is clearly no. You don't encourage public safety by shielding companies from the consequences of their actions. This is a key weakness of Bill C-22.

It also poses an unneeded risk and burden on the taxpayer. Natural Resources Canada has portrayed the \$1-billion cap on operator liability as balancing public compensation while ensuring that reactor operators aren't burdened with high insurance costs. But as seen with the oil and gas section of Bill, you can require \$1 billion in insurance and absolute liability with no coinciding cap on overall liability. You heard from representatives from CAPP, on Tuesday, that this wasn't a problem.

I will assert this: removing the \$1-billion liability cap will not increase costs to operators. As written, the NLCA needlessly transfers all of the financial risks above \$1 billion onto Canadians. This is contrary to the polluter pays principle, which brings me to my first recommendation.

The polluter pays principle has been omitted from the purposes section of this bill. It is 2014, not 1974, and this is a glaring omission. Greenpeace recommends the committee import the language regarding the polluter pays principle from the purposes section of the oil and gas section of Bill C-22.

Greenpeace recommends clause 3 be amended to read as follows:

The purpose of this Act is to ensure accountability in accordance with the "polluter pays" principle in case of a nuclear incident.

To apply the polluter pays principle, Greenpeace recommends amending the clauses shielding operators and suppliers from liability; specifically, clause 24 (1) should be amended to state that reactor operators have unlimited liability above the \$1 billion in absolute liability.

This is the same as for offshore oil and gas.

Unlimited liability is now an international best practice for operator liability and it is also the approach used by the government for the offshore oil and gas industry.

• (0950)

Similarly, clause 13, which completely shields reactor suppliers from liability even if negligent, should be amended. Greenpeace recommends clause 13 be amended to read:

In respect of damage that is caused by a nuclear incident, an operator may seek recourse against any person whose gross negligence causes an incident.

This would provide consistency between the oil and gas and nuclear sections of C-22 and meet another international best practice. India's nuclear liability legislation exposes suppliers to liability.

My final recommendation is forward-looking. There is ample documentation showing that the Department of Natural Resources Canada has intentionally avoided over the past decade, under both Conservative and Liberal governments, consulting Canadians while developing this bill. It is unsurprising, then, that NRCan believes it is acceptable to cap liability and transfer the majority of risk created by the nuclear industry onto Canadians.

Subclause 26(1) requires that the NLCA be reviewed every five years. Greenpeace recommends amending this clause to stipulate such reviews must be public and done in consultation with non-industry stakeholders. There's also international precedence for this.

That concludes my comments. I look forward to your questions.

**The Chair:** Thank you, Mr. Stensil from Greenpeace Canada.

We go now to our third witness from the Canadian Nuclear Safety Commission, Michael Binder, who is president and chief executive officer.

Go ahead please, sir, with your presentation for up to five minutes.

[Translation]

**Dr. Michael Binder (President and Chief Executive Officer, Canadian Nuclear Safety Commission):** Good morning, Mr. Chair and committee members.

My name is Michael Binder and I am the President of the Canadian Nuclear Safety Commission. It is a pleasure to accept your invitation to be here today.

[English]

The CNSC is Canada's nuclear regulator. Under the Nuclear Safety and Control Act, the CNSC carries out its threefold mandate: regulating the use of nuclear energy and materials to protect the health, safety and security of Canadians and the environment; implementing Canada's international commitments on the peaceful use of nuclear energy; and disseminating objective scientific, technical, and regulatory information to the public.

The CNSC is an independent, quasi-judicial administrative tribunal. It regulates all things nuclear in Canada including uranium mining, nuclear fuel fabrication, nuclear reactors and power plants, the production and use of medical isotopes, and the decommissioning and remediation of nuclear sites. The CNSC is therefore directly involved in regulating the nuclear facilities to which the Nuclear Liability and Compensation Act will apply.

As you know the government is responsible for setting policy such as this act, the NLCA, and the CNSC's role is to carry out its responsibilities under the act. We welcome the NLCA as it will modernize and clarify the various roles and responsibilities of those involved in case of a nuclear accident.

The CNSC's job is to make sure no claim is ever filed under the NLCA. We will not license a facility unless we are convinced it is safe. The CNSC is a hands-on regulator, and we have a robust regulatory framework in place to ensure that our licensees are operating safely and meeting their licence conditions.

One of the ways in which we do this is to conduct all kinds of studies. We undertake probabilistic safety analysis, we simulate large accident consequences, we look at physical protection measures to ensure security, and we do research to determine the life of pressure tubes. All these studies aim to ensure there are no weaknesses in the safety case and to bring in new measures to address any gaps identified.

For example, yesterday we released for public comment the "Study of Consequences of a Hypothetical Severe Nuclear Accident and Effectiveness of Mitigation Measures", a study that investigates the health consequences of a release due to a hypothetical severe accident involving four reactors, and the mitigation measures needed to safeguard public health. This is only the latest example of the CNSC's ongoing work as a safety regulator.

You have heard references to the Fukushima Daiichi accident in Japan in 2011. I can assure you that this unfortunate accident spurred a global effort to raise standards to guard against events that were previously considered to be improbable. For our part, the CNSC ordered a review of the safety case of all nuclear operators. The result has been increased safety measures in the design and operation of our nuclear facilities.

There is now added capacity to ensure the redundancy of emergency mitigation equipment to maintain safe shutdown of one or multiple reactors simultaneously. This added capacity includes 21 portable and mobile diesel operators to provide emergency power; 20 cooling water pumps on site with municipal fire trucks acting as off-site support; enough fuel to operate for days without off-site refuelling; and additional hydrogen mitigation equipment, such as passive recombiners, have been installed to ensure protection of containment, and, hence, reduce the likelihood of release. Furthermore, the NPP licensees have established a memorandum of understanding to construct a centralized emergency response centre to provide off-site support in case of an accident.

These enhancements in the on-site emergency mitigation capabilities, as well as off-site emergency response readiness, have been procured, installed, and designed so that potential for this kind of accident ever happening in Canada is practically eliminated.

Canada enjoys an enviable safety record with no claim ever having been made under the Nuclear Liability Act. Our role is to ensure this does not change under the new act.

● (0955)

[Translation]

Our role under the proposed act is to provide advice to the minister on the designation of facilities containing nuclear material as nuclear installations that will be covered by the act.

We will also verify on an ongoing basis that licensees who are required to carry liability coverage under the proposed act are in full compliance with this obligation.

[English]

In closing, the CNSC is actively involved in overseeing all of Canada's nuclear licensees. As such, we are fully familiar with the facilities existing in Canada and the nature of nuclear materials contained on those sites. We stand ready to provide any assistance the minister requires in implementing this new legislation.

I would be pleased to answer any questions you might have. Thank you.

**The Chair:** Thank you very much, Mr. Binder.

Thanks very much to all of you again for being here on short notice, and for your presentations to kick off the second part of our meeting today.

I'll go to the seven-minute round, starting with Mr. Leef, followed by Ms. Moore and Mr. Reagan.

Go ahead please, Mr. Leef, up to seven minutes.

**Mr. Ryan Leef (Yukon, CPC):** Thank you, Mr. Chair. Thank you to our guests today.

Mr. Binder, you indicated early on in your statement to the committee that you'll not license a facility unless you're convinced it's safe. Then you went on to talk a bit about your regulatory framework and some of the testing you've done. Can you comment on the current sites that exist in Canada in terms of their location, and contrast that with the Fukushima site? I mean, we can construct but we can't control acts of nature. I think what I've heard from the testimony is that there is low probability, but I think we all recognize that there's high consequences, of any sort of disaster. So the probability of an incident based on what you put in place seems low, but, of course, we know that the consequences are high.

What kind of assessment is done in the Canadian context for location? What sort of contribution, in terms of location, did the Fukushima disaster have on that incident?

● (1000)

**Dr. Michael Binder:** The most noticeable thing that changed in Fukushima is something that our technical expert called "beyond design" accidents.

Those facilities were designed with some very conservative accidents in mind. They assumed events based on historical records of seismic events, tornadoes, all kinds of ice storms and so on, and then they designed those facilities way, way back, about 30 years ago.

What Fukushima taught us here was that we can get too preoccupied with the technical analysis. What we decided to do is to assume a doomsday scenario, as I call it, that there will be a big, big accident. So what can you do to actually prevent it? By preventing it, we mean we don't try to preserve the asset; what we want to make sure of is that there will be no releases. What happened in Fukushima is that they were not able to bring water to the plant fast enough.

All the things we've done in Canada is create a post-Fukushima action plan with many, many mitigations to deal with how to make sure that we cool the plant. That means water, being able to draw water from the lakes, making sure that we can bring in back-up power fast enough to cool things.

I can go on for a long time on some of the technical details, but that's the lesson we've learned.

**Mr. Ryan Leef:** Sure. That's perfect. That's what I was curious about. I'm sure we could have a really interesting discussion getting right down into the nitty gritty of the operational design and considering all of the possible doomsday events and mitigation things, but that would take us quite a while.

You mentioned in your report that you've established an MOU to construct a centralized emergency response centre to provide off-site support in case of an accident. Can you give us an indication of the timing of the construction project on that, when it's going to be done and the scope and scale of it?

**Dr. Michael Binder:** In North America as a whole the U.S. is now establishing, if memory serves me right, five central locations where there will be assets. I'm talking about diesel fuel, fuel, and all kinds of equipment and material that can be flown to any site required.

In Canada, they've done a deal in which Pickering can help boost power in Darlington and vice versa. All of them can bring what exists on their sites, which are mobile, to the other sites in case of an accident. This memorandum of understanding is in place. They are now actually thinking about whether they really need to construct, on top of all of that, a centre that will be common to all of them.

**Mr. Ryan Leef:** When you contemplated that worst-case scenario, did you do it in the context of costs? My question is really around that: where does the \$1 billion get us? Do you measure these worst-case scenarios and your response in terms of the financial capacity that you have to deal with them, or just the operational capacity?

**Dr. Michael Binder:** Our mandate is not to deal with economic issues and cost controls. All we want to assess is where, if you have an additional dollar to invest in increasing safety, you would put it.

That's as close as we can get to a cost-effectiveness measurement to enhance safety. Our mandate is not economic. Our mandate is purely safety.

**Mr. Ryan Leef:** Then in that respect, how about the assessment of the expertise of the contractors? We heard about the pooled liability of expertise in international global contracting support. Do you take that into account? And where does Canada stand in terms of its expertise or its ability to draw on nearby expertise to immediately respond to that kind of disaster?

•(1005)

**Dr. Michael Binder:** We will seek expertise whenever we can get it. But we also have some pretty impressive experts on staff who are expert in nuclear physics, nuclear engineering, mechanical engineering, environmental assessment—you name it. They are expert, and when they lack a particular expertise, we will contract outside for some help. And we continuously participate with our regulatory communities to share information and share experiences.

**Mr. Ryan Leef:** Mr. Stensil, you made some interesting recommendations for the committee. You talked a little bit about shielding the operators by not extending the absolute liability.

In respect to some of the testimony we've heard—that these are publicly owned companies and one privately operated but still publicly owned—does that stance create a slightly different shift in exploration of liability, compared with other countries that have purely industry-driven or non-publicly owned companies?

**Mr. Shawn-Patrick Stensil:** I think we should look at it in the context—

**The Chair:** Mr. Leef's time is up, so please, if you could, give a very brief response.

**Mr. Shawn-Patrick Stensil:** I would say this. The provincial governments own these reactors. In other fields of risk transfer to the federal government, the federal government has recently done something very good, in saying that they will not backstop the risk for cost overruns at reactor projects and transfer them back to the province.

That's where the risk should lie. It's the same with radioactive waste. This is an exception, for some reason, in the federal regime that I think would be addressed by just taking the cap off.

**The Chair:** Thank you very much.

We go now to the official opposition, to Ms. Moore for up to seven minutes, please.

[*Translation*]

**Ms. Christine Moore:** Mr. Stensil, I would like to come back to your recommendation about absolute liability and the fact that under this bill, it only applies to the operator and not those who are part of the supply chain with respect to services. Mr. Binder may be able to add some comments to your answer.

If a subcontractor does welding or provides parts for a reactor, or tests the welding through X-rays but does his work poorly, what are the repercussions? Does that person have to be insured for a certain amount of money so as to cover the work they have done?

What about the case of a subcontractor working on a nuclear reactor, even though the reactor belongs to a crown corporation?

**Mr. Shawn-Patrick Stensil:** At this time, in terms of liability, a reactor supplier has no obligation if an accident occurs. That is how the law is worded and that is also true of the new version. In our opinion, this is not a good thing.

In the case of Fukushima, it was demonstrated that the designer, General Electric, was aware of the reactor's problems not only in design but also in manufacturing. That was not what caused the accident, but it did contribute to the radiation leaks into the environment. In any other industry, the Japanese could have sued the company.

We therefore recommend that there be a right of recourse in that respect.

The operator is always the entity that can be sued. However, a negligent supplier could be sued by the operator as he is in the best position to do so and thus obtain the largest amount of compensation for the affected population. That is what we are requesting.

**Ms. Christine Moore:** In fact, it would be the operator's insurer who would seek recourse.

**Mr. Shawn-Patrick Stensil:** The operator must always be insured for \$1 billion, but I suppose suppliers must also be insured as that is mandatory.

**Ms. Christine Moore:** Mr. Binder, do service suppliers have to comply with regulatory requirements in order to work in the nuclear sector?

For example, do regulations apply to welders working in the nuclear sector? What requirements must service suppliers meet?

•(1010)

**Dr. Michael Binder:** In the case of a major accident, the commission would not decide who was to pay, but rather the minister or the courts. During day-to-day operations, the operator is responsible for any accident, even if there are service providers.

**Ms. Christine Moore:** With respect to the Canadian Nuclear Safety Commission—

[*English*]

**The Chair:** Excuse me, Ms. Moore.

I see the bells are going for us to vote. They're half-hour bells. Can we reach some agreement on staying here and hearing from the witnesses as long as possible?

**Some hon. members:** Agreed.

**The Chair:** How much time should we leave the committee before the vote?

Mr. Trost.

**Mr. Brad Trost:** Perhaps, Mr. Chair, we'll go another two rounds, about 10 more minutes, perhaps?

**The Chair:** So go about 10 more minutes?

**Mr. Brad Trost:** More or less, and whatever we decide, we have to decide it quickly.

**The Chair:** Okay, let's do that.

Ms. Moore, continue, please. I'm sorry for the interruption.

[*Translation*]

**Ms. Christine Moore:** After having heard the four recommendations, I feel less prepared to begin a clause-by-clause study of the bill. I believe we have not sufficiently examined these recommendations. It would be more prudent to have one or two extra sessions. We could always come back to it.

Mr. Binder, if I have correctly understood you, someone who provides services to a crown corporation operating a nuclear reactor has no regulatory requirements to meet and is under no supervision whatsoever. No specific regulation applies to anyone dealing with a crown corporation operating a nuclear reactor.

**Dr. Michael Binder:** The reactor must be safely operated, but there are sometimes conflicts between the operator and the supplier.

**Ms. Christine Moore:** So essentially, you only deal with the operator to verify safety. You do not intervene with service providers.

**Dr. Michael Binder:** That depends. If something very serious happened, we could compel a supplier to meet with us in public to explain the reasons why the incident took place. Regulations require that an error be made public and publicly debated.

**Ms. Christine Moore:** Mr. Stensil, in Bill C-22, are there any other ways to make service providers liable, besides the one in the amendment you proposed?

**Mr. Shawn-Patrick Stensil:** Given the current wording of the bill, the amendment I have proposed is the simplest way to make them liable. This is being done in India. We could amend clause 13 of the bill entitled "No recourse" in order to specify the cases in which an operator may sue a supplier.

The current clause in the bill stipulates that "an operator has no right of recourse", except in cases of deliberate misbehaviour by a supplier. In my opinion that article could be amended. If the bill were redrafted, it could stipulate that individuals could directly sue suppliers. However, as only one meeting has been set aside to discuss this, I will say that the simplest way forward would be amending clause 13 of the bill.

**Ms. Christine Moore:** Do I have any time left, Mr. Chair?

[*English*]

**The Chair:** No, you are out of time, Ms. Moore.

We go now to Mr. Regan, for up to seven minutes.

**Hon. Geoff Regan:** Thank you very much, Mr. Chairman.

Let me start with Mr. Binder.

Thank you all, by the way, for being here this morning.

Mr. Binder, numerous Canadians, as you can imagine, have written to the committee, our members' offices, in relation to Bill C-22. One of them was Mr. Chris Rouse of New Clear Free Solutions in New Brunswick. He wrote to my office some time ago and made a submission to the committee earlier in the week to say that he has asked the commission for the definition of nuclear safety and risk used in deciding liability limits—the legal definitions you apply. He claims he's not able to get an answer, so I wonder if we could ask you to provide one. I don't expect you to have it just at your fingertips, but I wonder if it would be unreasonable to ask you to provide it before Tuesday's clause-by-clause meeting.

• (1015)

**Dr. Michael Binder:** In fact, I think we publicly replied to Mr. Rouse. We're quite familiar with his views, and the definition of safety is in the act. It's in our legislation. So it's very readily available.

**Hon. Geoff Regan:** Thank you.

The next question is that according to the 2014-15 main estimates, the Canadian Nuclear Safety Commission will receive about \$1.6 million more in funding than the amount planned in the 2013-14 main estimates, but \$1.2 million less than was actually spent in the last fiscal year, when this year's main estimates were tabled. So the question is, in light of this \$1.2-million reduction in the estimates, what impact will the adoption and enforcement of Bill C-22 have on the commission's budget?

**Dr. Michael Binder:** The budget, as you know, is set annually, and it's a function of our work. Of our budget, 70% is cost-recovered from the licensees. So, for example, when Quebec decided to shut down the Gentilly-2, that had an impact on our budget. It changes from year to year, because right now we are dealing with the waste management of decommissioning.

So it will vary, but I can assure you that our ability to oversee the safe operation of a nuclear power plant has not been diminished.

**Hon. Geoff Regan:** But will your requirement for funding be diminished this year compared to last? You're going to have \$1.2 million less, it appears.

**Dr. Michael Binder:** No. The way the budget is set is on an annual basis as to what the work is that we anticipate for the year. We invoice. Part of it, 30%, is appropriation, and the rest is up to the actual licensee, depending on the work that's going to be done.

**Hon. Geoff Regan:** Thank you.



Mr. Barrett, you mentioned this issue, and it was also in the submission from Bruce Power, who noted that the bill allows the minister to authorize additional insurers, something that they in their words “strongly encourage”. Why is this important to your industry, and what happens if the government refuses or drags its heels on this matter?

**Dr. John Barrett:** Well, it is my understanding that under the previous act and the limits there, the pool of insurers, the Nuclear Insurance Association of Canada, was able to handle the requirements, and the premiums were paid on that basis. As it goes up to \$1 billion, the view of industry is that, as in any market, a little more competition might help. It has been a kind of monopoly by the small group of insuring companies, and this might be a good way of seeing if there's enough competition to bring down the premium. I think, like individuals in their households, industry looks to try to see a better deal when it comes to premium paying. So that was the main driver behind it.

**Hon. Geoff Regan:** Thank you very much.

**The Chair:** Are you finished, Mr. Regan? Okay, thank you.

We go now to Mr. Calkins.

**Mr. Blaine Calkins (Wetaskiwin, CPC):** Thank you, Mr. Chair.

**The Chair:** We still have 21 minutes.

**Mr. Blaine Calkins:** I'll be as brief as I can. I didn't think I was going to get an opportunity to ask questions.

Thanks to my colleague, Mr. Regan, for being so brief.

I do have a question in regard to the definitions, Mr. Barrett, that you talked about, insofar as nuclear installation and so on.

I know the department officials who were here before talked about the next steps coming forward. I didn't get a chance to ask them a question, but they talked about bringing forward these similar types of definitions in the regulations versus putting them in the act. My question to them was, why would they put it in the regulations and not in the legislation in the first place?

I'm wondering if you could clarify for us whether having those definitions more clear, does it matter to you whether they're in the act or in the regulations?

**Dr. John Barrett:** I think it is the clarity of the definition, because as I mentioned at the outset, the nuclear industry is a pretty wide tent, and it involves a number of members, some of whom are involved in uranium mining, for example. Others we talked about today, the power generators, are mostly affected by the legislation that's at hand.

Along the way in the fuel cycle, nuclear fuel is produced from the uranium in Canada in the form of being fabricated, prepared, assembled, and ready for the CANDU reactors. It's for the industry to know which particular facilities are being considered as part of the legislation. So it's simply a clarification to make sure both the backgrounder and the legislation has exactly the same....

•(1020)

**Mr. Blaine Calkins:** But it doesn't really matter to you where it exists. I would imagine that the government wants it in the regulations because the regulations are more nimble than legislation

passed in the House of Commons. As we can see, there have been five iterations of this bill up to this particular point in time.

The other question I have—and anybody can answer this if they choose to—is that if you take a look at the 1970 legislation that came into force in 1976, with the cap at \$75 million, and you put that \$75 million in 1970 into today's dollars, that works out to about \$465 million, and the absolutely liability cap has now gone to \$1 billion. So it's actually exceeded the consumer price index, or whatever value a dollar has, by more than double. I'm just wondering if I can get some clarification from any of you who want to comment on why it's \$1 billion. Is it more driven by international standards or international agreements or is it actually driven by experiences derived from other incidents?

Mr. Barrett.

**Dr. John Barrett:** I would offer my own opinion on that. Until September 2013, I served as Canada's ambassador to the International Atomic Energy Agency, and I chaired the board of governors. I was present there during the Fukushima accident as well as the follow-up to that. Mr. Binder mentioned earlier the very extensive 12-point action plan on safety that was developed at the IAEA following the accident. My own take on it is that it's partly driven by the understanding that liability is something that needs to be addressed and updated and securely placed. It doesn't matter where you are in the world, although we have to take into account the specificities of each bit of technology and where it's located, etc. But that being said, I think, collectively, the mood there was that all countries should look at their own legislation and boost it up.

**Mr. Blaine Calkins:** Mr. Stensil.

**Mr. Shawn-Patrick Stensil:** No matter what, I think that number will be arbitrary. Natural Resources Canada had three criteria for determining the \$1 billion number, including the capacity of the insurance market, and foreseeable accidents, which I believe was the second one. We should not confound the amount of insurance capacity or the required security with a liability limit. That's what we're importing into this legislation from the 1970 legislation. Greenpeace would suggest that this legislation be designed to ensure industry-based compensation for any type of accident up to a national catastrophe, in which case, of course, the government would step in, and that is not served by having a cap on liability.

**Mr. Blaine Calkins:** I appreciate that. You already mentioned that earlier.

I don't know how much more time I have, but I have one last question for Mr. Barrett.

You talked about the ratification of the International Convention on Supplementary Compensation. I believe once we get this legislation passed, and Canada ratifies it, and, I think, one or two other countries—maybe Japan or Korea—ratify it—the international convention is close to coming into force—as you said in your comments here, it will provide further protection in the case of an international incident.

Could you expand on that or give us an example of how the legislation would actually further improve safety if there were an international incident?

**Dr. John Barrett:** Indeed.

I think the first example that comes to mind is again with reference to the Japanese situation. I remember very clearly that the countries surrounding Japan were quite concerned about the impact of the accident and whether it would reach their shores and affect their countries. As you know, without rehearsing all the background to it, the CSC is building on other previous treaties, and strengthening it. With that, I think there's going to be much more effective international recognition that the accident or incident would not have any boundaries and is transboundary in nature.

**The Chair:** Thank you.

Thank you, Mr. Calkins.

We're down to a little over 15 minutes. All of you have in front of you a copy of the budget. You can look at that and we could vote on it at the next meeting. The total budget for this study is \$3,900.

Do you want to just approve the budget?

**Some hon. members:** Agreed.

**The Chair:** The budget is approved.

Okay.

Thank you very much to the three witnesses for being with us today. Sorry for the disruption. We would have appreciated more time, but that's the way it works around here.

The meeting is adjourned.

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