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—
Chair

Mr. Leon Benoit

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•(0905)

[English]

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

We have two parts to our meeting today, as everyone knows. In the first part, we have two witnesses. In the second part, we will start clause-by-clause consideration of this bill.

We're continuing with our review pursuant to an order of reference of Tuesday, October 30, 2007, on Bill C-5, An Act respecting civil liability and compensation for damage in case of a nuclear incident, the Nuclear Liability and Compensation Act.

Thank you very much, gentlemen, for being here today. I will take your presentations, up to ten minutes each, in the order that you're listed on the agenda today.

We'll start with Gordon Edwards, president of the Canadian Coalition of Nuclear Responsibility. We'll then go on to Michel Duguay, a professor from the Department of Electrical and Computer Engineering at Université Laval.

Mr. Edwards, go ahead please, for up to 10 minutes.

Mr. Gordon Edwards (President, Canadian Coalition for Nuclear Responsibility): Thank you very much, Mr. Chairman, and members of the committee.

My name is Gordon Edwards. I have a PhD in mathematics. I graduated originally with a gold medal in mathematics and physics from the University of Toronto. I have been involved for over 30 years as president of the Canadian Coalition for Nuclear Responsibility and also as a consultant to both governmental and non-governmental bodies on nuclear issues, on issues related to nuclear safety and radioactive materials.

Before it is used in a nuclear reactor, uranium fuel can be safely handled using only a pair of gloves. Inside the reactor, however, hundreds of new radioactive substances are created, called fission products. These are literally the broken pieces of uranium atoms, which are split in order to produce energy.

The fission products are millions of times more radioactive than the fresh uranium fuel. Immediately after discharge from a reactor, a single CANDU fuel bundle can deliver a lethal dose of penetrating radiation in just 20 seconds to any unprotected person standing one metre away. Indeed, the irradiated fuel is so radioactive that it has to be cooled under 14 feet of circulating water for at least 7 to 10 years or it will spontaneously overheat, experience self-inflicted damage,

and release radioactive gases and vapours into the surrounding atmosphere.

Inside the core of a reactor, even after the fission process has been completely terminated, the radioactivity of the fission products is so intense that the core continues to generate 7% of full power heat. That's an awful lot of heat, and if adequate cooling is not provided, even after complete shutdown of the reactor itself, the residual heat is more than enough to melt the core of the reactor at a temperature of 5,000°F.

When the fuel melts, large quantities of fission products are released as gases, vapours, and ashes. I have provided the committee members with excerpts from four official Canadian documents. These excerpts confirm the fact that core melting accidents are possible and even probable in Canada, if Canada chooses to build a large fleet of nuclear reactors.

Unfortunately, committee members, I neglected to bring the bag that has those exhibits in them. I'm going to deliver it later today to the clerk, and you will be getting copies of these. They are available in both French and English.

The official bodies that produced these statements, which I have prepared for you, are the Ontario Royal Commission on Electric Power Planning, the Atomic Energy Control Board, the federal Department of Energy, Mines and Resources, and the Select Committee on Ontario Hydro Affairs.

As a participant in the deliberations of both the Royal Commission on Electric Power Planning and the Select Committee on Ontario Hydro Affairs, I can assure the committee members that the rationale for this bill, C-5, is based on the potential damages of fuel melting accidents. Without fuel melting, it is not possible for a nuclear accident to have off-site property damage exceeding \$10 million.

However, the consequences of core melting accidents can typically run into the tens of billions of dollars or even hundreds of billions of dollars and can make large regions of land uninhabitable for a considerable period of time.

In the case of such a catastrophe, Bill C-5 limits the liability of nuclear operators to a very modest amount. It eliminates all liability for nuclear equipment suppliers, even if they supplied defective equipment that caused the accident, yet it does not address any important measures that would limit the overall financial liability to the Canadian taxpayer or the social liability of any affected population.

The Canadian Coalition for Nuclear Responsibility feels that it is important for the elected representatives of the people to ensure that the nuclear industry is held publicly accountable and to ensure that the best interests of Canadians are not compromised in order to serve the interest of the nuclear industry.

We believe the figure of \$650 million cited in the act has no sound scientific or financial basis, and this arbitrary amount merely serves to distract the committee from much more important questions. For instance, just how great might the total damage be in case a core melt accident occurs here in Canada? Have these studies been carried out? Have they been given to the committee members? Have they been discussed in Parliament? What if such an accident occurred at the Pickering site? How much of the Toronto population would have to be evacuated and for how long? How far would the radioactive contamination spread?

It is sobering to realize that even today, 20 years after the Chernobyl accident in the Ukraine, some sheep farmers in northern England and Wales still cannot sell their mutton because of radioactive contamination of the meat, caused by radioactive cesium-137 given off by the Chernobyl reactor.

Will farmers in the Ottawa Valley and Quebec have to curtail their agricultural practices following a nuclear accident near Toronto, such as those envisaged in this bill? Is the Canadian Parliament expected to pass this Bill C-5 to limit the liability of the nuclear industry without giving any careful thought to the question of limiting the ultimate financial liability to the crown?

One way of limiting public liability would be to require that any new reactors be sited far away from large population centres. Observers both inside and outside of the nuclear industry have commented that the Pickering reactors are among the worst-sited reactors in the world because of the catastrophe potential, so close to such a large and vital city. Such a catastrophe could be realized in the event not only of a severe industrial accident, but also as the result of external causes, such as a large earthquake, causing multiple pipe breaks in the reactor core area, or an act of deliberate sabotage or terrorism, which can no longer be discounted as fanciful.

I was one of the fortunate few to attend a 1977 conference of the nuclear fuel cycle, sponsored by the International Atomic Energy Agency, held in Salzburg, Austria. At that conference, one of the leading American nuclear scientists, Alvin Weinberg, spoke for an hour to an audience of about 300 nuclear scientists from every corner of the world.

His message was stark. He said: We nuclear scientists have not faced up to the full consequences of complete success. If we succeed in building tens of thousands of nuclear reactors around the world, which we must do to make any noticeable dent in the world's use of petroleum, we can expect to have a core meltdown approximately every four years. The lesson is clear. We must stop building these reactors near large cities.

I was very impressed by the sincerity of Mr. Weinberg's proposal. In fact, he recommended that large tracts of land should be set aside specifically for nuclear reactors and nothing else. As he put it, if the reactors are going to melt down, let them do so there, far away from the population centres.

Alvin Weinberg's proposals may strike some of us as extreme. But perhaps it is only because we have not taken the time and trouble to educate ourselves about the science behind core melting and the possible consequences of such events. In 1978, one full year before the Three Mile Island accident in Pennsylvania, the Ontario Royal Commission on Electric Power Planning spent several months on the question and found that if there were 100 reactors operating in Canada at some future date, then under the worst assumptions of probability, there could be a core meltdown here in Canada once every 40 years.

In his report, Arthur Porter, a professor of engineering from the University of Toronto, wrote that serious consideration should be given to building any new nuclear reactors underground, so that the radioactive releases from an uncontained core meltdown could be largely trapped in subterranean caverns and prevented from spreading over vast land areas.

Another way of limiting the nuclear liability of the crown and of the Canadian population is to invest in other energy technologies that can reduce greenhouse gases faster and more efficiently than nuclear power can possibly do, without posing the same risks of catastrophic impact, requiring bills such as this Bill C-5, which is available for no other industry that I am aware of.

According to a report issued in May 2007 by the Intergovernmental Panel on Climate Change, nuclear power currently provides about 16% of the world's electricity, which amounts to about 2.7% of total energy use. In the next quarter century, the IPCC estimates that nuclear power could increase its contribution from 16% to 18% of electricity supply. This is far from solving the climate change problem.

Meanwhile, the same IPCC report states that renewable electricity currently accounts for 18% of electricity worldwide—that's the target in 25 years for nuclear—and that in the next 25 years renewable electricity could account for 35% of all electricity. That's twice as much as nuclear can provide in the same timeframe. Evidently, renewables are a much better bet than nuclear, at least for the next 25 years, in the opinion of this estimable panel.

• (0910)

Germany decided about 10 years ago to phase out of nuclear power. They have shut down two of their seventeen reactors already and will soon shut down a third one. In that same 10-year period Germany has installed 20,000 megawatts of wind power. That's more than the entire Canadian nuclear program. Meanwhile, Germany is leading all other European countries in reducing greenhouse gas emissions.

So perhaps instead of just passing Bill C-5, the committee members should be refusing to pass it and recommending that a comprehensive inquiry into the risks and benefits of nuclear energy, in comparison with other energy technologies, be undertaken. In the public interest such an inquiry is long overdue. It would be a shame for this committee to approve a piece of legislation that is so peripheral to the larger issues.

Ultimately, Bill C-5 is based on much misinformation, and perhaps even a profound misunderstanding of the nature of the energy choices that we all must confront. I am concerned about the marginalization of our democratic institutions. I am concerned about the problem of governance of this industry. I do not believe, if we are going to embark upon an enlargement of this industry, it is responsible to continue to allow it to operate outside of public scrutiny, outside of responsible accounting, and I would hope this committee would do something about that.

Thank you.

• (0915)

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

Now to Michel Duguay from the Université Laval, for up to 10 minutes.

Go ahead, please.

Prof. Michel Duguay (Professor, Department of Electrical and Computer Engineering, Université Laval): Thank you for the invitation, honourable members.

I hold a BSc in physics from the University of Montreal. I received a PhD in nuclear physics at Yale University back in 1966. I then worked for AT&T Bell Laboratories in New Jersey for 21 years, with a three-year leave of absence to Sandia National Laboratories in Albuquerque, New Mexico, where I worked on X-ray laser devices.

In 1988 I left AT&T and came to Laval University, where I have been a member of the department of electrical engineering and computer science.

I think you probably received the summary of my presentation. It's only a couple of paragraphs. In any case, I'll be going over it.

The Chair: Just go ahead, please, Mr. Duguay.

Prof. Michel Duguay: Okay, I just wanted to make sure.

I find that in formulating this new Bill C-5, there are two important aspects. One of them is compensation for damages suffered, and the other is the expansion of nuclear power.

The nuclear power industry has been saying that they need this bill in order to meet international conventions, and also to perhaps reassure the public that if there were an accident, there would be proper compensation.

As you all know, the city that is most threatened by a major accident is Toronto. In the Toronto area, \$650 million would come to a compensation of about \$200 per person or house. Many people feel that this is not very much. In the United States, the figure that is thrown about is \$9 billion for a major accident at one nuclear reactor site. That would come to \$3,000 per person or house.

The Pembina Institute in Canada has estimated that an accident in the Toronto area would cause damages of about \$1 trillion. That would come to \$300,000 per person or house. In my opinion, that would not be a desirable event and sufficient compensation, even at that high figure.

The second aspect is expansion of nuclear power because of the climate change question.

The first aspect I address in the short resumé I sent you is that there is room for liability coverage in the case of nuclear reactors, because if you read the AECL documentation, which I do every year, and also the CNSC documentation, you find that all of these people in the nuclear industry are terribly worried about a major accident. It's a nightmare, and they have confessed it, even in public.

So a major accident is possible, and in the resumé I sent around, I quote AECL in 2002, where they addressed the question of the positive nuclear coolant void reactivity coefficient. In the existing CANDUs, if you have a loss of cooling water, or bubbles, or anything that diminishes the density of water trying to cool the reactor, the nuclear reactions increase in their intensity. This is called a positive feedback, and this feature has been recognized by AECL as being undesirable.

It makes the old CANDU reactor illegal in England or in the United States. It does not meet the security standards of England or the United States. So in their effort to develop a new reactor, AECL has insisted on having a negative coolant void reactivity problem, but as far as I know, it still has not been solved completely.

That makes the old CANDU reactors very dangerous. I'm upset by the fact that instead of building new reactors, which are far safer, they retube a design that was made in the 1970s.

In the last four decades, there has been tremendous progress in all areas of technology, including nuclear power, so I find it very upsetting that they're proud of doing retubing contracts here and there, in New Brunswick, at Bruce around Toronto, and now they want to do Gentilly in Quebec. It's just going back to a design of the 1970s, a design that does not meet the security standards of England or the United States, the first two nuclear countries in history.

Regarding expansion, I work in the field of renewable energy, and I was at a convention on wind power about a month ago. What's amazing about wind power is that it has been increasing by 25% a year for the last decade. Canada is positioning itself in this area. Ontario already has 400 megawatts of installed power. Quebec has about 500 megawatts. B.C. has a big project to have 350 megawatts near Prince Rupert, with further expansion to 15,000 megawatts in the coming years.

In Europe, the European Union passed a law in September that calls for the production of 20% of electrical power in the European Union by renewable energy by 2020.

In the United States, people are talking about having 25% renewable electricity by the year 2025.

• (0920)

If you look at the wind energy maps and the solar energy maps that are available online, you will find that Canada is blessed with tremendous wind and solar resources.

The main point I want to make to the Minister of Natural Resources is that if we manage—if you manage with us correctly—our natural resources, which include wind and power and geothermal, we could easily increase government income by a tremendous amount and lower the income taxes.

I will stop here.

The Chair: Thank you, Monsieur Duguay.

We will now begin the questioning, for up to seven minutes in each round, starting with the official opposition.

Mr. St. Amand.

Mr. Lloyd St. Amand (Brant, Lib.): Thank you very much, Mr. Chair, and thank you, Dr. Edwards and Dr. Duguay, for your presentations this morning.

Dr. Edwards, you indicated that \$650 million is a “modest amount”. That may well be the case, but you would agree, surely, that it's a less modest amount than the current limit of \$75 million.

Mr. Gordon Edwards: It's rather like fixing a leaky rowboat by plugging 10% of the holes. I don't think this is really solving the problem. The problem is that you have an enormous catastrophe potential, and if the object of this legislation is to serve the interests of the Canadian public, I think it does a poor job.

In the United States of America, the Price-Anderson Act, which is the comparable legislation in that country, was passed at least 10 years before there was even thought about having such legislation here in Canada—the old Nuclear Liability Act—and they started back then at \$560 million as the liability. They are now up to the billions of dollars in terms of nuclear liability. They're talking about \$9.2 billion. That's a liability cap, because they know the damages would be far more than that.

I believe this legislation is....

Frankly, I regard it as a dishonest question. It's rather like the Clarity Act: are you going to ask an honest question or a dishonest question? The question that this act is really putting before this committee is do you approve nuclear power? Any vote for this bill will be taken as an approval of nuclear power. But they don't want to ask the question to you straight out; they want to ask it to you in an indirect way.

Mr. Lloyd St. Amand: Fair enough.

All right, let's deal with that then: should the country approve of nuclear power?

Not so much during this fall session, but earlier on, we've had some compelling presentations from representatives of the wind energy sector and the solar energy sector. My understanding of their presentations to us is that whatever we do, however aggressively we move toward more reliance on wind and solar, the reality is that we are some years away from significant reliance on wind and solar. That's probably the unhappy reality.

Bearing in mind that we have energy needs—clearly, we have large energy needs in Canada—we're not going to eliminate reliance on nuclear any time in the next year or two. As I understand it, it's here and it's with us, and we're not going to soon get rid of it. Bearing that reality in mind, and bearing also the reality in mind that it's been....

Has a nuclear accident occurred within Canada?

• (0925)

Mr. Gordon Edwards: Yes, nuclear accidents have occurred at Chalk River. There was one in 1952 in which the reactor blew its lid

off. The core of the reactor had to be buried off-site. Fortunately, it was a very tiny reactor. It was the NRX reactor. There was also a smaller accident in 1958 involving the NRU reactor.

There have been accidents in Canada, not involving commercial power reactors on a major scale, but we've had some pretty close calls. In fact, we've had a close call, if you remember, with the accident that shut down the Pickering unit 2 reactor as a result of a pressure tube breaking in the core of the reactor—something that the engineers and scientists had promised officials could never happen.

Mr. Lloyd St. Amand: My final question is for Dr. Duguay.

My interpretation of your presentation is that we would do better as a committee, in order to protect the citizens of this country, if the legislation were to prohibit the retubing contracts. You were talking about reactors and saying the old reactors are not necessarily replaced with new, better, safer technology, but are retubed or refitted.

Is that a fair interpretation?

Prof. Michel Duguay: Wow, that would be just wonderful if you could do that. That would be just wonderful.

If you read the AECL documentation, you become convinced that the new reactor designs are so much better. Everybody in the international nuclear physics community says the same thing. The old CANDU goes back to 1970.

You know, in Three Rivers and Bécancour, we have this reactor called Gentilly 2. Gentilly 1 was built as a showcase. It was so unstable that it never delivered a single kilowatt-hour to the network of Hydro-Québec. It is shut down. It is like a museum right now. That's how immature the CANDU technology was in the 1970s.

May I add another comment?

The Chair: Go ahead, please, yes.

Prof. Michel Duguay: About the expansion of nuclear power, the 2006 latest AECL report is very proud to say that since 1990, AECL has contracted for seven CANDU reactors for international customers, more than any other power reactor vendor in the world. So since 1990, seven reactors amounting to something like five or six gigawatts...well, there's three times as much wind power being added every year right now.

So nuclear energy has hit a plateau internationally and what is expanding tremendously is wind and solar, and we have it in Canada.

The Chair: Thank you, Mr. Duguay.

Mr. Alghabra wants to have a question or two as well. Go ahead.

Mr. Omar Alghabra (Mississauga—Erindale, Lib.): Thank you, Mr. Chair.

To Dr. Duguay, I appreciate your comments about the new technology versus the old technology. I'm curious, though, as far as the bill that is in front of us, dealing with the liability issue and the insurance issue, do you have any specific comments on the bill itself, as it stands, regardless of the nuclear technology that producers are using?

Prof. Michel Duguay: As I said, there's a lot of talk in the AECL documentation about being in harmony with the United States. Well, in the United States they're talking about a \$9 billion limit on liability. That's a little more serious.

One point that I make in the resumé that I passed around is the fact that people in this country ought to be aware that nuclear power is expensive and does carry with it a great danger. Your Bill C-5 could recognize that officially.

• (0930)

The Chair: Mr. Alghabra, your time is up.

We go now to the Bloc Québécois, Monsieur Ouellet.

[*Translation*]

Mr. Christian Ouellet (Brome—Missisquoi, BQ): Thank you, Mr. Chairman.

My first question deals with the fuel waste that is stored outside the reactor enclosure and which is presently kept in a pool, unless I am mistaken.

Do you consider this waste to be dangerous? Could it be used for an act of sabotage or terrorism? Is it well protected and out of harm's way?

[*English*]

Mr. Gordon Edwards: Yes, this is in fact very much of a concern. About the swimming pool, or *piscine*, containing the irradiated fuel, it contains not one year's worth of irradiated fuel but ten years' worth of irradiated fuel, sometimes more. This would be a terrible accident if there were to be damage where the water was drained from the pool and possibly fires would occur. Zirconium, which is the metal that is used for cladding the fire, is very combustible and burns with a very intense heat, so you could have a serious zirconium fire in the pool if there were an accident or an act of sabotage that drained the water from the pool. It would simply heat up spontaneously.

So yes, that's a very serious concern and it has been flagged in the United States as a matter of national priority, because these *piscines*, these swimming pools, are not shielded. They're not under the dome of the reactor, and they're not shielded in a heavily reinforced way. They are much more vulnerable. Of course, that would apply to the Nuclear Liability Act. The act has to take that into consideration as well.

My main concern here is that if we're going to limit the liability of the operators of the reactor, why do we not also act to limit the liability of the population and of the crown?

Prof. Michel Duguay: Can I reply to your question?

You know, Bécancour is right on the St. Lawrence River, which is a maritime seaway. If you look at what terrorists are doing around the world, they're in the habit lately of filling boats with explosives, exploding them, and destroying a whole lot of property around them.

Gentilly is extremely vulnerable to such an act. When there was an explosion in Halifax in 1917, the so-called Halifax explosion, everything within a radius of 2 kilometres was totally destroyed in Halifax. In Gentilly, you're talking about it being a few hundred metres from the river; it's right on the river. So a small boat filled

with explosives could cause tremendous damage. Then there's ten times more radioactive waste outside in this pool, which has a very ordinary ceiling.

The National Academy of Science in the United States has issued a report with the Nuclear Regulatory Commission, with the backing of industry, saying that the worst target that could be hit in the U.S. right now would be the swimming pools holding radioactive waste from nuclear reactors. These are the most vulnerable, the most dangerous spots, in the U.S.—which, of course, applies to Canada as well.

[*Translation*]

Mr. Christian Ouellet: Is there water circulating in these pools?

Mr. Gordon Edwards: Indeed, water needs to be circulated slowly in these pools in order to cool the spent fuel. Without cooling, the fuel would heat up and be damaged.

[*English*]

Prof. Michel Duguay: May I add something to this?

Well, water is cheap; it's easy to build a swimming pool. But hell, if just an airplane falls on it, with benzene and everything else leading to a big fire, such as at the World Trade Center in 2001, the water goes away, the radioactive waste burns spontaneously, and you're dumping thousands or millions of curies into the air.

This would totally devastate the St. Lawrence River.

What do you think the Bloc Québécois people would do?

Mr. Christian Ouellet: Run.

Voices: Oh, oh!

• (0935)

[*Translation*]

Mr. Christian Ouellet: Do I have some time left, Mr. Chairman?

[*English*]

The Chair: You have two and a half minutes still, Monsieur Ouellet.

[*Translation*]

Mr. Christian Ouellet: In Germany, Japan, Austria and Switzerland, there would be no limit to liability. This means that the companies are financially liable.

What will happen in these countries if these companies go bankrupt? Do you have an answer?

[*English*]

Mr. Gordon Edwards: I'm not sure I fully understood you, but I think you're asking about other countries. I don't know the situation in other countries; I do know the origins of the problem.

The origins of the problem date back to 1953, when Eisenhower made his "Atoms for Peace" speech at the UN. This led to a study in 1957 in the United States called the Brookhaven report. The report said that a small reactor of 200 megawatts, 20 miles from the city, could cause over \$7 billion in off-site damages—back then.

Now, when the insurance industry was called to a congressional committee to testify about providing coverage for that, the insurance people said, "You must be crazy, we cannot possibly cover that liability." That's what led to the original Price-Anderson Act. It's also what led to the situation where every insurance policy in the world, to my knowledge, contains the nuclear exclusion clause saying that homeowners are not covered in the event of radioactive contamination. That's a direct result of the studies carried out by the nuclear industry in 1957.

[*Translation*]

Mr. Christian Ouellet: In addition to the guarantees provided here, would home owners subscribe an insurance policy covering nuclear damage? Do you think this would be possible?

[*English*]

Mr. Gordon Edwards: No insurance company—in North America, certainly, and to the best of my knowledge, in the world—will offer any protection whatsoever in the event of your property being damaged by a nuclear accident.

That's why Bill C-5 is before us, so the Government of Canada will take the place of an insurance company. The private financial investors, who will insure almost everything in the world, will not insure against a nuclear accident.

Prof. Michel Duguay: May I add something?

What's even more dangerous here is the concept of cross-border liability. If there's an accident at Pickering that dumps a lot of radioactivity on the United States, what do you think will happen? There are lots of lawyers in the U.S. Congress, and lots of lawyers everywhere in the States, and they love to sue. There are companies in Canada that refuse to do business in the States because they're afraid of being sued.

So if you had radioactive waste being deposited from Bécancour onto Maine, or from Toronto onto New York state, or wherever, there would be tremendous lawsuits from the States. I lived for 26 years in the States. I think one can say that very few Americans would hesitate taking whatever measures were necessary to acquire compensation for damages.

The Chair: Thank you, Monsieur Ouellet.

We now go to the New Democrats.

Ms. Bell, you have up to seven minutes.

Ms. Catherine Bell (Vancouver Island North, NDP): Thank you, Mr. Chair, and thanks to the witnesses for appearing. I found it very interesting. Thanks for your explanation of how a meltdown occurs. Being from B.C. and nowhere near a nuclear facility, I had never had that explained before. I've read things, but the technical stuff can be a little hard to understand.

I also really want to thank you for your comments on our responsibility. The members of Parliament were elected to protect the public interest—the environment, the social interests, and economic interests of our communities, and so on. I think that's very important in the consideration of this bill.

I asked the question of a previous witness from Port Hope who talked about the amount—I think per person or household, I can't

remember—being around \$8,000 out of the \$650 million. You talked about \$200 per household in Toronto, of course a much bigger city. Really, when you think of the value of property in those areas, it's nothing. So it's understandable that the liability should be increased tremendously.

The other thing you said that I think is important is that we're not asking an honest question here. I felt that. This bill, if passed, would enable the expansion of nuclear facilities in Canada, and I believe that's what this bill is all about. So I thank you for that comment.

I just want to know if there is any way to amend this bill that would improve it so that we are looking after the public interest in a better way, and without it being a *carte blanche* for the industry to just build nuclear reactors as they want to in the oil sands, and things like that.

• (0940)

Mr. Gordon Edwards: In an ideal world, I would think, any bill that is going to give such a benefit to the nuclear industry in limiting the burden of liability on their shoulders...

It is in fact a piddling amount. I mean, \$650 million is not even the cost of a modest retubing of a nuclear reactor. So this is a relatively small amount.

If we're going to give them this enormous benefit on behalf of the people of Canada, then surely we can strike a bargain and say, "If you're going to build new reactors, you damn well better build them in such a way as to limit the liability to the Canadian population and to Canada."

For example, why not build them underground? Why not build them in remote areas far from cities? Why are there not considerations in this bill to limit the damage rather than to just limit the financial responsibilities of certain corporations? Why is it the public purse is considered to be bottomless?

There's no consideration given to how much money might have to be paid out of the public purse as a result of an accident that was none of the government's or public's doing.

I think it would be the responsibility of serious legislators to ensure that a piece of legislation was designed to do what the elected representatives of the people are primarily there to do, which is to protect the best interests of the people and not of the nuclear industry. I am concerned about this governance issue. I do believe that while this committee is asked to basically rubber-stamp a technical document, Bill C-5, which is going to allow them to meet certain conventions internationally, it's going to be interpreted as more or less a rubber stamp of the nuclear industry also.

It basically is a green light that says, "Go ahead, build them wherever you want. We'll limit your liability, and you don't have to worry about it." I think that's a very sad state of affairs in a country as proud and democratic as Canada, and such a leader on the world stage in terms of our institutions. It's a sad comment on the state of Canadian politics that the House of Commons and the elected representatives of the people do not have a more important say on matters of much greater import than protecting the liability of the operators of nuclear reactors.

Just recently, for example, within the last year, we've had the government, without consulting Parliament at all, approve a plan by the nuclear industry, under which it is going to cost \$25 billion minimum to centralize nuclear waste at some central location in Canada. Why was this not brought in the form of a bill to the House of Commons to be debated and to be considered and deliberated upon? Those decisions are made without any deliberation, and you are asked as a committee to simply rubber-stamp this relatively insignificant bill.

Believe me, if such an accident were to happen, a Chernobyl-type accident, it would be very small comfort to know that the Government of Canada was going to establish a tribunal to adjudicate claims.

The Chair: You still have a minute and a half, Ms. Bell.

Ms. Catherine Bell: I'd also like to hear from Mr. Duguay basically on the same question, because he talked about alternative energy solutions, which I think are contrary to what my colleague from the Liberal Party said. He said we're years away from wind and solar power and that alternative. I think we are actually there and we have the capacity to expand on that.

Prof. Michel Duguay: Perhaps I may reply with two aspects.

One, to improve the bill there was a suggestion by a deputy to prohibit the retubing. That would be a great step forward. You would find lots of people at AECL who would be very much in favour of this. Just read their documentation.

Secondly, I commend B.C. for its initiative with the Nai Kun project near Prince Rupert and the Queen Charlotte Islands. I think those islands have a new name, which I've forgotten....

Ms. Catherine Bell: Haida Gwaii.

Prof. Michel Duguay: Haida Gwaii—well, almost “hideaway”.

At any rate, west of Prince Rupert it's a 350-megawatt wind farm that will be in construction next year, expanding to 15,000 megawatts. It's really great.

The fact is that right now the increases in solar power and wind power are far more than the increases in nuclear power. Nuclear power has reached a plateau. All of these people, if you read their documentation, are trying to get a much better reactor. They think they have one, and I believe they do have one on the drawing board.

To design and build a nuclear reactor, it's a good 10 years. If you read the last UN report, you see that the obligation is upon us to do something important before 10 years is over. In 10 years, if we have business as usual, then we're going to have climate catastrophes.

• (0945)

The Chair: Thank you, Mr. Duguay.

Thank you, Ms. Bell, your time is up.

We go now to the government, to Mr. Trost, for up to seven minutes.

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

I appreciate the perspective that the witnesses have brought today.

To summarize—and if I make an incorrect summary, would the witnesses please tell me—Mr. Edwards' position is basically that we should move to close down, as soon as possible, the nuclear industry in Canada because it is too dangerous for Canada in its entirety.

That was the impression I got. Please correct me if I'm wrong.

Mr. Gordon Edwards: I said no such thing. I said that if this industry requires extraordinary assistance from the Government of Canada in order to protect itself from financial liability for off-site damages, then they should, in turn, be held to account.

For example, I was thinking about the previous question. It seems to me that it would be a fair thing to say that in the future siting of any new nuclear reactors, the Government of Canada and the Parliament of Canada should be involved in determining ahead of time whether this is a good site in terms of the risk to the Canadian population and the risk to the crown, the financial risks, and the other risks. It seems to me this is just simply a question of fairness.

I don't appreciate having words put in my mouth about shutting down the nuclear industry. I said no such thing.

The Chair: Mr. Edwards, there's no need for hostility here. Mr. Trost, in his preface, actually said he was asking you whether it was an accurate assessment.

Mr. Gordon Edwards: Okay, I apologize.

The Chair: Let's just move ahead, please, Mr. Trost.

Mr. Bradley Trost: No, no, this is the sort of clarification that helps me to understand better where you're coming from.

I had understood Mr. Duguay's concerns, while for the totality of the industry, were about certain specific designs that were of considerably more concern. If it's done right—and you don't think it has been done right, the nuclear industry in Canada, or for that matter around the entire world—and let's say we put these in the Canadian Shield, put them somewhat underground, partially underground, portions underground, etc., this could then be a useful functioning.... I mean, it is functioning now, but it could actually be something that would fulfill some of the Atoms for Peace goals that Eisenhower and people in the 1950s had envisioned with this sort of utopian fuel source.

If it were done right.... Again, I'm asking: could it be done right, in your opinion?

Mr. Gordon Edwards: If it were done right, this bill would be unnecessary. I think the private insurance companies would be happy to insure such reactors, and I think that's the route to go.

I think the route to go is to tell the industry, look, you're not babies any more, it's time to grow up. You convince the insurance industry that your reactors are safe, and therefore that they can safely insure them. You convince the insurance companies that they are perfectly within the guidelines of insurance policies and insurance guidelines to provide insurance to individual homeowners and property owners against radioactive contamination.

Why should the Government of Canada have to be in the business of providing insurance?

The Chair: Mr. Duguay.

Prof. Michel Duguay: Yes, I think you're right: it could be done right, the way you explained it. But one little thing one has to remember is that we're supposedly all in favour of sustainable development. AECL is also in favour of sustainable development. The uranium reserves are not that large. They may be large in Canada, but there's the entire world that Canada is selling to. So all these people are trying to develop new types of reactors that will make more efficient use of uranium-238, as well as uranium-235, and perhaps even thorium.

So if we're talking about sustainable development, we have to keep in mind a little bit that we have children and grandchildren, and if nuclear power is that great, there should be some uranium left over for them too.

• (0950)

Mr. Bradley Trost: I appreciate that.

I appreciate your thing of looking towards the future, but by my count, we have six major installations in Canada: Bruce Power A, Bruce Power B, Darlington, Pickering A and B, Hydro-Québec's site, and New Brunswick Power at Point Lepreau.

If we don't pass this bill, we're just leaving the liability at \$75 million. There's no way that this \$650 million will cover a core major disaster. I mean, it's \$3,000, \$800, whatever per person. It's not even going to come close.

So the insurance here is basically to cover up, if we can use the term, a small accident, a Three Mile Island that doesn't completely wipe out New York City or wherever it would be here. If we just leave this at \$75 million and something small does happen, we end up picking up that gap between \$75 million and \$650 million.

Is there a different number? Is there a different interim measure that we should take for these smaller types of incidents?

Prof. Michel Duguay: If you read the AECL documentation, you are forced to have at least \$650 million, otherwise you're left out of the international community and it's total disaster for nuclear power.

Mr. Gordon Edwards: This is basically a commercial guarantee that the industry wants for its own purposes. On the \$650 million, has there been any study conducted? Has there been any study that shows that \$650 million is a logical amount?

When we talk about nuclear accidents, I am sure you cannot have a nuclear accident that causes more than \$10 million in damages unless it is a core-melting accident.

Mr. Bradley Trost: Mr. Edwards, I guess the reason is that, in my research, they had done the modelling in today's dollars on what Three Mile Island would cost, and it was in the neighbourhood of \$650 million. We're also using—and maybe you could look at it, for your opinion—

Mr. Gordon Edwards: I'd be interested in taking a look at it.

Mr. Bradley Trost: —a similar report that NRCan had done, and these numbers, within that broad range, had also been there. That's why in our research we had been looking at these numbers.

The Chair: You still have 45 seconds, Mr. Trost, or someone else from the government side. No more?

Okay, we'll go back to the official opposition. We have roughly six minutes left. We'll go with two minutes for each questioner in the next round, so basically one question.

Mr. Tonks.

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

Thank you for being here. Your testimony, as Ms. Bell has indicated, has enervated our sense of accountability.

The question has been asked with respect to how you establish risk assessment. I would assume that the risk assessment would be related to the capacity for the industry to self-regulate it. You have indicated that the regulating functions are inadequate. You've at least referred to the AECL.

We had NIAC here, which said it has its own engineers and so on, and this should increase the public's sense of accountability. Then you come in and say, look, we have great concerns with respect to the ability for the regulating function to be carried out, even though it goes beyond this bill.

May I ask you on behalf of the committee whether you have seen a presentation that appraises the total regime and framework and establishes clear thresholds where accountability is wanting, or other approaches that could be taken that this committee could consider as part of this or another bill? Is there any such thing that you've seen?

Mr. Gordon Edwards: I don't know of any such study.

I would like to apologize to the committee if there's any edginess to my remarks. I think the edginess is basically a reflection of frustration that the committee does not have available to it the tools that would be necessary to do a really good job. That's my concern.

Especially if we are going to have a nuclear renaissance and build more reactors, then I think it's very necessary for legislators to have much more knowledge and resources available to them to weigh these problems. I sympathize with members of the committee, who are given very little to go on other than a piece of legislation that has been written without much deliberation of the deeper issues surrounding that. So that's really the basis of my frustration.

The accountability problem is, I think, a serious one, and one that Parliament must take seriously for the future, because right now the Canadian Nuclear Safety Commission answers to the same minister that Atomic Energy of Canada Limited answers to, which is the Minister of Natural Resources. This means there's only one voice at the cabinet table speaking on nuclear issues. Even the CNSC itself, the Canadian Nuclear Safety Commission, although it is responsible for the health and environment, it has no health department. It does not have a staff of independent health scientists. Most of its staff are drawn, in fact, from the very industry that it is regulating, and the minister it is reporting to is the minister who is promoting that very industry.

Now, this poses serious governance problems for the future. I would like to see, at some point, some aspect of the House of Commons, or some aspect of our parliamentary system, that stands up and doesn't take the first offer that's put on the table.

Where's the negotiation? If we're representing the public interest, should we just take the industry's offer of \$650 million and say, "Thank you, thank you, we'll take it, we'll pay all the rest"? Or should we say, "Wait a minute now. You're asking the Government of Canada, asking the taxpayers, to assume an enormous financial liability, and you're limiting yourself to \$650 million? Let's negotiate. Let's talk about this."

I don't see any negotiation taking place. The question remains, where *is* the accountability?

• (0955)

The Chair: Thank you, Mr. Edwards and Mr. Tonks.

Now to the Bloc Québécois.

Madame DeBellefeuille.

[*Translation*]

Mrs. Claude DeBellefeuille (Beauharnois—Salaberry, BQ): Thank you very much, Mr. Chairman.

Thank you, Mr. Edwards and Mr. Duguay.

You studied a lot. You are university professors. The evidence you gave is therefore credible. We must take it just as seriously as that of all the other witnesses we heard.

I listened to your presentations and as a citizen and a member of Parliament I am of the opinion it would be irresponsible to maintain the coverage at only \$75 million dollars. One must be consistent and recognize that governments, both liberal and conservative, neglected to do the catch-up that was required. The result is that today we must jump from \$75 million to \$650 million dollars. There are also the premiums that the nuclear power operators have to pay and the pressure they are under as a consequence. Their concern is understandable. For years, there has been this neglect on the part of the governments in power in Canada.

I agree with you, \$650 million dollars is far from enough. Just imagine if an accident were to happen in Pickering. The industries and the municipal infrastructures of cities like Oshawa and Toronto would be completely destroyed. We know that just one accident in the history of Canada, in any nuclear plant, would cause damage well in excess of 650 million dollars.

The witnesses we heard before you told us that it is difficult at the present time to find insurers offering coverage beyond \$650 million dollars. In Europe, some countries have asked for one billion dollars protection. The amendment of the Paris Convention is presently delayed because there are not enough funds to pay for such a coverage.

As you say, we the members of Parliament are more or less stuck, as you say. We lack tools and information.

If we increase coverage and if operators are liable for 100% of all the damage caused, would the insurance, the cash and coverage be available everywhere in the world? This is my big question.

I agree with you, we should not promote nuclear energy. We should not encourage this form of energy, however we have nuclear plants operating at the present time. We must look at how we will be

able to compensate municipalities or Canadians should an accident occur.

What do you say about the fact that no one, no insurance company, will cover the operators? What can we do in this regard?

[*English*]

Mr. Gordon Edwards: I'm not sure I fully understood everything you said.

The Chair: Mr. Edwards, the answer will have to be quite short. Her time is up, so could you give just a very short response, please?

Mr. Gordon Edwards: I think you were asking what would happen if the coverage weren't available. Is that what you were asking—what would happen if they couldn't provide the coverage?

I think in that case, one has to consider whether such a liability should be allowed to exist, because really this is a question for society at large. In fact, that was one of the comments made in the early days by one of the insurance executives. It's questionable whether such a liability should be allowed to exist.

That's the reason for the comments about siting, remote siting, and underground siting. These are the things that are important to consider. If the industry can, in fact, design reactors that are free of these difficulties, then they should do so.

One of the ways of pressuring them to do so would be to not pass this kind of legislation, which allows them to continue to be, you might say, sloppy and not to have to design reactors that are truly safe.

• (1000)

The Chair: Thank you.

Finally, we will go to Mr. Harris for two and a half minutes.

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

Mr. Edwards, in response to your last comment that this type of liability arrangement would lead to sloppiness in design, I kind of think that the nuclear scientists who design these projects are professionals. They're fully trained in what they do, and they would probably take offence to that. I don't fit in that category, so I'll leave that offence to them.

I want to get to a point that talks about the cost of the liability versus the cost of doing all of the things that you've suggested. In your studies, apart from determining that there are some serious safety factors, in your opinion, with the existing sites and the way we're building them now, have you taken all of your suggestions into consideration and arrived at the extra cost factor of putting all of your ideas into being? How would that relate to the electricity charge to the consumer?

After all, whether it's a liability insurance claim or it's doing all of the things that you suggest, there's only one person who's going to pay for it. It's going to be the user of electricity.

How do your ideas, in total, relate to electricity costs for the consumer?

Mr. Gordon Edwards: I think it would make nuclear power reflect the true costs of nuclear power more accurately than it does at present. At the present time, the marketplace gives false signals. It gives the signal that the nuclear power is cheaper than it really is.

So I think it would be a correction. It would be a correction to the market and would make the nuclear electricity be priced more realistically in terms of other options.

And by the way, they're not my suggestions. These suggestions are suggestions made by royal commissions and by people in the nuclear industry itself.

Mr. Richard Harris: I understand that, but I'm hearing it from you today, and so you've obviously done your background.

So you're suggesting that the nuclear industry is giving out false operating costs, and their rates are falsely identified because of shortfalls and sloppiness in the building of them, that they don't want to talk about? Is that what you're suggesting?

Mr. Gordon Edwards: I believe that's why Ontario Hydro accumulated a \$30 billion debt and had to off-load a good portion of that debt onto the backs of the ratepayers, which they pay every month on their hydro bills as stranded debt. It's because—

Mr. Richard Harris: Do you have documentation to back up that statement, sir?

Mr. Gordon Edwards: It's because the price of nuclear electricity has not been properly assessed in the first place.

Mr. Richard Harris: Is that an opinion or do you have documentation to back that up?

Mr. Gordon Edwards: There is much documentation to back that up.

Mr. Richard Harris: Thank you.

The Chair: Thank you, Mr. Harris.

Thank you both very much for coming this morning. I certainly do appreciate it.

Mr. Gordon Edwards: May I make one concluding remark? I would ask the committee members to please look at the exhibits I've prepared and which I will deliver. I'm sorry I didn't have them to hand out.

The Chair: Thank you very much, Mr. Edwards, Monsieur Duguay, and all of the committee members for their good questions.

We will now suspend for about two minutes while we change witnesses. Then we'll start our clause-by-clause.

• _____ (Pause) _____

•

• (1005)

The Chair: We will resume the meeting with clause-by-clause of Bill C-5.

We have as witnesses today, from the Department of Natural Resources, Brenda MacKenzie, Dave McCauley, and Jacques Hénault.

If you could just let us know what your positions are and in what capacity you're here, I'd appreciate that. We usually have that information, but we don't today because of the short notice.

• (1010)

Ms. Brenda MacKenzie (Senior Counsel, Environment Canada, Department of Justice Canada): Good morning, and thanks for this.

My name is Brenda MacKenzie. I'm justice counsel and I was assisting the policy officers at Natural Resources Canada during the drafting of this bill. I'm now acting senior counsel at Environment Canada.

Mr. Dave McCauley (Acting Director, Uranium and Radioactive Waste Division, Department of Natural Resources): Good morning, my name is Dave McCauley. I'm the acting director for the uranium and radioactive waste division at Natural Resources Canada. We're responsible for the policy work and the development of the nuclear liability and compensation bill.

Mr. Jacques Hénault (Analyst, Nuclear Liability and Emergency Preparedness, Department of Natural Resources): I'm Jacques Hénault, again with Natural Resources Canada. I work in the uranium radioactive waste division and I'm a policy analyst.

The Chair: Thank you.

I'll just talk a little about procedure....

Ms. Bell, I'll recognize your hand first.

Ms. Catherine Bell: Maybe I should hear your procedure first.

The Chair: Sure.

If you have any questions as we're going along, don't hesitate to make that clear and we'll deal with them as we go. We're not going to rush through this in any fashion.

The procedure is to go through clause-by-clause. I will ask for a show of hands for votes, unless someone requests a recorded division. In that case, of course, we will go through and have a recorded division. It will be at the will of the committee on each clause to determine that. In some cases, if the committee is comfortable with it, we will group some clauses because I know there are many clauses in the bill on which there has been no indication of any concern or any proposed amendments. There are others for which we know there are amendments and there may be some further amendments coming as we go through this.

Ms. Bell, you've given an indication that you intend to make some amendments, as we go through the process, so just make sure you let us know, as we're going through this, where you want those changes to be.

Ms. Catherine Bell: The problem is that my amendments have been submitted and they are not back from the law clerk yet, and I'm really not comfortable proceeding without them here for everyone to see.

The Chair: Do you know which clauses they're for?

Ms. Catherine Bell: Off the top of my head....

The Chair: As we go, will you recognize the clauses?

Ms. Catherine Bell: The problem is that they're not back yet. The law clerks have some questions they want to talk to us about. I need to be comfortable that they're going to be here and in the right format and all those things. I'm really not comfortable proceeding.

The Chair: Yes, Mr. Anderson.

Mr. David Anderson (Cypress Hills—Grasslands, CPC): I'm just wondering if we can proceed with clauses that are not being amended by Ms. Bell, if that's possible. This is why we asked that the amendments be done by yesterday at noon. We're able to accept them, but if we start clause-by-clause, perhaps the way to handle it is we can come back to those clauses later and—

The Chair: Good suggestion; that's why I was asking, Mr. Anderson. That's about the only way we can proceed.

If you don't know which clauses these amendments will deal with, perhaps you could ask someone to get those for you. That way we would know which clauses to pass by and we can come back to them later.

Yes, Mr. Alhabra.

Mr. Omar Alhabra: Thank you, Mr. Chair.

I really do appreciate the fact that the officials are here, but I hear Ms. Bell's concerns. I don't want us to be seen to be pushing this as if there's something we want to happen quickly under the guise of stifling debate or discussion. I think Tuesday was the first time we heard from the witnesses on this bill, so maybe we could wait until Tuesday to start doing clause-by-clause. I'm sure the amendments by Ms. Bell may include more than one clause or component of the bill.

I'm just wondering if we can give them more time.

The Chair: I certainly am guided by the committee. We have come here prepared to start procedure on clause-by-clause. I know that Mr. Anderson indicated it is highly unlikely that we will get through it today. If we even knew which clauses to pass over, we could start, and then deal with the ones that we can deal with. The others we could leave until Tuesday.

It's up to the committee. We have the officials here.

Mr. St. Amand.

•(1015)

Mr. Lloyd St. Amand: With respect, Mr. Chair, we're aware that the officials are here. That point has been made. I appreciate that you're going to be guided by the will or the sentiment of the committee.

I think that Mr. Alhabra's suggestion is prudent and that we should start clause-by-clause on Tuesday morning rather than doing it in something of a potentially piecemeal or ad hoc fashion.

The Chair: Mr. Tonks.

Mr. Alan Tonks: Mr. Chairman, I don't know if this is in order, and I don't know whether the committee is interested in proceeding in this respect, but we do have the officials here. These officials have been part of the drafting of the legislation. There has been some testimony with respect to implications.

Is the committee interested in asking officials any questions with respect to what we've heard from the various deputants, in order to

get clarifications? It seems to me that we have them here, and if the committee were interested in that, we wouldn't have to adjourn. We could ask a few questions of the officials of a general nature.

The Chair: Mr. Tonks, you know—you've been here as long as I have, I think—that this is exactly what the officials are here for, to answer questions on any clauses that any member has any questions about. If we could proceed with it, that would be great.

Mr. Alan Tonks: No, but that's not what I'm saying. Perhaps I can clarify.

I don't mean necessarily related to clause-by-clause, but related to some of the testimony we have heard with respect to, for example, risk assessment. On what basis was the \$650,000 established? There was some conjecture that it was enough, that it was not enough, that not enough administrative due diligence was done, and so on.

Those are of a general nature. They're not specific to clause-by-clause, Mr. Chairman.

The Chair: Mr. Anderson.

Mr. David Anderson: On a point of order, in order to be fair to the witnesses, they were called here under the understanding that we were doing clause-by-clause. That's why they're here.

A lot of the testimony we heard earlier didn't have to do specifically with the bill. I'm not sure it's fair to our witnesses who are here today to expect them to be able to respond to that. I'm not sure they were even here for the testimony.

If we're going to deal directly with the bill, I think that's fair to them. Otherwise I don't think it is.

The Chair: I've heard your concern, Mr. Anderson.

Ms. Bell and then Mr. Alhabra.

Ms. Catherine Bell: I want to thank my colleagues for the understanding with respect to the motions that we put forward. As I said, we had them in on time. I'm not sure what the issue is with the law clerks, but they wanted to discuss them further, and they haven't sent them back yet.

My initial feeling was that we should adjourn. After hearing Mr. Tonks' suggestion, I thought that it was actually plausible. We haven't really heard from the department and the officials. We've only heard from the minister.

I know that, with all due respect to them, they maybe weren't prepared to come and talk about that and were looking at clause-by-clause, but I don't know if that would be any different, because they would be prepared to talk about everything in the act anyway and to give us some information.

Mr. Chair, we might, because of what they might say and after having heard witnesses, have more questions for them and we might have more amendments we want to make based on all the testimony that we've heard. If we aren't able to hear from them as just witnesses as opposed to on clause-by-clause, then I'm really not comfortable proceeding with the clause-by-clause.

I'll wait for your ruling on that.

The Chair: This is very unusual. In 13 years I haven't heard of asking officials to stay and give general testimony when they've come for clause-by-clause.

There are others, however, who want to make some comments.

Mr. Alhabra.

Mr. Omar Alhabra: Thank you, Mr. Chair.

I want to echo what Mr. Tonks has said. I thought that was a great suggestion. I don't care if we still call it clause-by-clause. We are going to be examining the bill; we're just not going to be as specific about a particular clause.

We had the opportunity to hear witnesses, and I'm not just referring to the witnesses we had this morning, but the witnesses we had on Tuesday who were very specific about certain clauses of the bill. Perhaps we could come back to officials as part of the clause-by-clause for clarification to respond to some of the concerns that the witnesses had given us. Even though it may not be going in a particular order, I would still have no problem in calling it clause-by-clause in pursuing some clarification from the officials.

Thanks.

• (1020)

The Chair: Madame DeBellefeuille.

[*Translation*]

Mrs. Claude DeBellefeuille: Mr. Chairman, I understand the request of the NDP.

Our organization worked very hard yesterday in order to be able to table the amendments within the time limit. Our party has worked hard and people clocked a lot of overtime. Indeed, the deadline was very tight. I can understand if the NDP has difficulty bringing in its amendments on time.

I think you should ask what the members think and that we should grant Ms. Bell's request.

[*English*]

The Chair: Yes, I have asked, and I've had some response. There seems to be, certainly on the opposition side, a desire to have the witnesses give more of a technical briefing rather than proceed with clause-by-clause.

Mr. Boshcoff.

Mr. Ken Boshcoff (Thunder Bay—Rainy River, Lib.): I'm also inclined to use the time to ask the witnesses here for their responses to some of the previous deputations. If that isn't acceptable, then I'd like to use the remaining time to set our priorities for the next three meetings that might happen after next Tuesday, then for the coming term, so we could at least use the time productively.

Thank you.

The Chair: Okay.

It seems that the will on the opposition side, certainly, is to ask questions of the witnesses who are here, pertaining to this legislation.

I am here, of course, to serve the committee, so let's start with questioning the witnesses in the normal fashion. That means the official opposition for up to seven minutes.

Go ahead, Mr. Alhabra.

Mr. Omar Alhabra: Thank you, Mr. Chair.

I do want to reiterate my appreciation for the officials being here today.

There is a lot of feedback from the nuclear association and its members about the insurance aspect of the bill, whether the market itself, access to the market or insurers, or the type of security for the 50% self-insured, or any other type of insurance. Another 50% have actual insurance policies.

I'm one of those people who take a long time to understand things, so could you first explain to me how the insurance market works for nuclear producers? What is NIAC's role and what is the minister's role, etc., in deciding who's eligible to insure and who's not?

Mr. Dave McCauley: Certainly. Thanks very much.

The insurance market, under the existing legislation, is one in which we have a group of insurers who have been approved, first by the Office of the Superintendent of Financial Institutions as having the financial wherewithal to provide insurance to Canadian nuclear companies. These insurers are then approved by the Minister of Energy, Mines and Resources, or Natural Resources Canada, to actually be insurers who are able to provide insurance under the existing Nuclear Liability Act in that they accept, basically, the principles and the requirements of the legislation, and they have entered into an agreement with the federal government on the sharing of risk under the policy that has been approved for operators under the legislation.

• (1025)

The Chair: You have a point of order, Madame DeBellefeuille.

[*Translation*]

Mrs. Claude DeBellefeuille: Excuse me, Mr. Chairman, I think I did not quite understand the translation. In fact, I do not understand what we are doing. What is the committee's decision? Are we proceeding with clause-by-clause?

Our amendments were ready. I do not understand what is going on right now.

[*English*]

The Chair: Maybe I misunderstood. As chair, of course, I carry out the will of the committee. The witnesses came to hear clause-by-clause, and I was hoping to proceed with clause-by-clause, but there seemed to be a desire to put it off. Maybe I should have asked for a motion—probably, appropriately, I should have—and made that decision. Maybe I was prejudging, having heard your comment right now.

I had made the ruling that we would, as seemed to be requested from all opposition, as I understood it—obviously incorrectly—go to just questioning on the bill, without formally going through clause-by-clause. But having heard your comment, I think we should actually have a motion on how to proceed here.

Yes, Mr. Alhabra.

Mr. Omar Alghabra: Mr. Chair, I appreciate what the Bloc is saying, but I thought she herself said that she doesn't mind postponing the clause-by-clause until Tuesday, because she said she appreciates how long it took for the amendments to be put together and be approved by the law clerk.

If she's changing her mind, then maybe.... But I certainly understand why you understood what you understood, because that's what I understood.

The Chair: Okay. It's not just a bad morning for me, then. Thank you.

Yes, go ahead.

[*Translation*]

Mrs. Claude DeBellefeuille: Mr. Chairman, there may be a translation problem.

I was sympathetic to the request of the NDP, however our amendments were tabled on time. The suggestion to deal with those clauses that have no amendments was fine with us.

You are going fast and I am lagging behind because of the translation and I am not clear about where you are taking us.

[*English*]

The Chair: Because of my obvious misunderstanding, then, I want to see from the committee what the will of the committee is.

Mr. Anderson.

Mr. David Anderson: I'd just like to make the point that we would like to go ahead with clause-by-clause, with the provision that, if Ms. Bell wants to set aside certain clauses for now and come back to them, we would be willing to do that. That was our position.

I also understood Ms. DeBellefeuille to say that she didn't want to go directly to it, but if they would like to, we'd be glad to.

The Chair: The chair has erred here. I really did think it was a clear opinion right down the side of the opposition that we should not proceed with clause-by-clause now. Obviously that's not the case.

It will require a motion to change our agenda, then, from what it was. We will proceed with clause-by-clause, unless there's a motion brought before this committee and passed to change that agreed-to procedure.

Ms. Bell.

Ms. Catherine Bell: Mr. Chair, with all due respect, I want to clarify something, because it's been said a couple of times—or inferred, possibly—that the NDP didn't have our amendments in on time. That is not the case. They were in on time, and they are still with the law clerk.

There was a short timeframe, and that was referred to by a couple of the other opposition members. I just feel that because of the short time period to get this in—and I haven't gotten them back—I'm not willing to proceed.

So I would move an adjournment at this time.

The Chair: I have to go directly to the question, of course. An adjournment motion is not debatable.

Those in favour of adjournment, show your hands, please.

(Motion negated)

• (1030)

The Chair: We will carry on as scheduled, with the clause-by-clause, then. We're back to that. We only have half an hour.

As I explained, then, we will go through, clause by clause. We will vote on each clause once the discussion and debate has ended.

It is normal to stay the first clause, which is the title.

Is it agreed that we stay the first clause and deal with that at the end? Usually, it's one of the last things we do in the process.

It is in the Standing Orders, actually, so we don't have to vote on it. I guess it is in the Standing Orders.

(On clause 2—*Definitions*)

The Chair: Clause 2 is the section that deals with the definitions that are used throughout the bill. There is no standard procedure for this.

I'm suggesting that we stay this clause till after we've gone through the other clauses, because these definitions, of course, apply to those clauses, and there may be need for some change if something changes in some of the clauses. This is the way that seems to work fairly well on some occasions.

I'm suggesting that. Is it the will of the committee that we do that and proceed with clause 3?

Madame DeBellefeuille, you have a question or a point of order.

[*Translation*]

Mrs. Claude DeBellefeuille: No, but I want to be sure I understand. You say you are going to set aside the Bloc amendment dealing with the definitions clause. Am I right?

[*English*]

The Chair: Yes, we would deal with that full clause, the definitions, after we dealt with the bill itself because some of those definitions may be required to change, or some you may want to change as a result of the debate or the changes in clauses, if there are in fact changes.

We will come back to it. There will be a chance for the Bloc amendment and any other amendment that may be brought before the committee to be dealt with.

Mr. Anderson.

Mr. David Anderson: I would just like to point out that some people are dealing with a bill for the first time. I would just point out that this is the regular process that happens with bills.

The Chair: Thank you, Mr. Anderson, for that. In my comments I said there is no standard procedure for this definition section, but in most of the legislation I have dealt with over 14 years, it has been handled in this fashion. It seems to work best.

Is it agreed that we stay that clause until after we have dealt with the clauses other than the final ones that we deal with, such as the title and that type of thing?

It is agreed on division. There is a clear consensus. There is consent.

Is there consent to stay this clause with the interpretation until toward the end?

(Clause 2 allowed to stand on division)

(On clause 3—*Minister*)

The Chair: Let's start with clause 3. I haven't seen any proposed amendments until clause 24, on which there are amendments. There are a whole group of clauses that don't seem to have been contentious. It is up to you entirely. Do you want to handle these one at a time, or do you want to group them in some fashion? Do you want to deal with all of these up to clause 24? And then we'll do them clause-by-clause after that. It's entirely up to the committee.

Do you want to go through them one at a time? Okay.

On clause 3, is there any debate?

(Clause 3 agreed to)

(On clause 4—*Limitation*)

The Chair: Is there debate on clause 4?

Yes, Ms. Bell.

Ms. Catherine Bell: In clause 4 it says, "This Act does not apply", referring to what it does not apply to, and I believe a terrorist attack is.... We heard from some of the witnesses about the pools that the nuclear waste is cooled in. They are open and they are not safe. That is basically what they said. There is potential for a terrorist attack or any type of natural disaster even.

If there is a possibility of a huge catastrophe from this and the industry is not liable—I just want to be clear on this clause that says the industry is not liable in the event of a terrorist attack—does that mean that the federal government is liable?

• (1035)

The Chair: I'll just leave it up to the three of you to decide who would like to answer, unless the question is directed to one of you.

Go ahead, please, Mr. McCauley.

Mr. Dave McCauley: No, in fact what the legislation says is that the act is applicable to damages relating to a terrorist activity, and to the extent this may be terrorist activity associated with a nuclear fuel waste management location, it would also apply to damages associated with that. Nuclear fuel waste is managed in a very secure manner on licensed sites today, in pools or in dry storage, and in fact it's subject to the same type of security as the installation itself, but if there were a terrorist attack and if the damages related to the nuclear fuel waste, it would be covered under this legislation. We made it very explicit that the operator would be liable if there were a terrorist activity, a terrorist action that resulted in nuclear damage. We made it very explicit that in fact that would be covered under the legislation and the operator would be absolutely liable.

The Chair: Are there any other questions?

Ms. Bell, on clause 4.

Ms. Catherine Bell: It's only that we need to go back and forth between—

Ms. Brenda MacKenzie: I'm sorry. So that you understand, you can read subclause 4(1) by itself. This is where the rule for terrorist activity is written. It's right here. It says the act does not apply to those emissions or damage that result from an act of war, other than terrorist activity as defined in the Criminal Code.

That brings it in. It doesn't apply to an act of war but it brings terrorist activity back in, relying on the definition of terrorist activity in the Criminal Code.

That's to your question about terrorist activity.

The Chair: Thank you, Ms. MacKenzie.

Mr. McCauley, do you have something to add to that?

Mr. Dave McCauley: No, I have nothing to add.

The Chair: Ms. Bell, do you have any other questions on clause 4?

Are there any other comments or discussion on clause 4?

(Clause 4 agreed to on division)

(Clause 5 agreed to)

(On clause 6—*Designation of sites*)

The Chair: Yes, Mr. St. Amand.

Mr. Lloyd St. Amand: Thank you, Mr. Chair.

Since you're here, witnesses, with respect to clause 6, I don't know if you caught any of the previous presentations by Dr. Edwards or Dr. Duguay, but there was a flavour, if I can say that, to their presentations that nuclear sites are handed out rather liberally—small "l" liberally.

It's clear that this act, in and of itself, has nothing to do with the designation of nuclear sites or the type of reactors that will be built on those nuclear sites. Those questions and issues are dealt with in the Nuclear Safety and Control Act. Is my understanding correct?

• (1040)

Mr. Dave McCauley: That's correct.

Mr. Lloyd St. Amand: Thank you, sir.

The Chair: Thank you. Are there any other questions on clause 6?

(Clause 6 agreed to)

(On clause 7—*Limitation*)

The Chair: Are there any comments or questions?

Yes, Mr. Alghabra.

Mr. Omar Alghabra: Thank you, Mr. Chair.

I want the officials to clarify or respond to the letter that we got on behalf of Westinghouse. They're raising concern about the ambiguity of the word "damage". To put it on the record, could you please take a moment and respond to their concerns?

Mr. Dave McCauley: We haven't seen the letter that Westinghouse has provided to the committee.

Mr. Omar Alhabra: I'll try to summarize it and I'll try to do it justice. It was written by Gowling on behalf of Westinghouse. Their concern is that the word damage is used in various sections in this act but meaning different things at times, sometimes injury, sometimes bodily injury or physical injury.

They are suggesting it's leaving a lot of ambiguity and a lot of room for interpretation, and they're asking that it be redrafted and revised as necessary to, as they put it, "eliminate any ambiguity as to the intended scope of liabilities for losses, and exclusions from liabilities for losses, under the Act".

Ms. Brenda MacKenzie: Yes, this is something that was addressed at great length during the drafting process. It is our view that this is not at all ambiguous. I know we've skipped over clause 2, but if we start at the definition of a nuclear incident,

[Translation]

"nuclear incident" means an occurrence or a series of occurrences having the same origin that causes damage for which an operator is liable under this act.

[English]

It says that the operator is liable for things that the act says the operator is liable for. Compensable damage is detailed in clauses 13 through to 20 under the heading "Compensable Damage", "*Dommages indemnisables*". The Gowling counsel is absolutely correct at common law. If you go to the courts, you might not always be certain what damage means. What we have done in this statute is everything in our power to clarify exactly what we mean by damage.

Every time you see a reference to the term "nuclear incident", and it's mentioned throughout the act, it ties in the notion of damage for which an operator is liable under this act, which takes us back to clauses 13 to 20.

The Chair: I'd like to make a comment. The letter that Mr. Alhabra is referring to was received by the clerk late last night. That's why everyone may not a copy.

Are there any other questions, Mr. Alhabra?

Mr. Omar Alhabra: No, Mr. Chair. I just wanted the record to show the official's response to the concern. I'm comfortable with that.

Thank you.

The Chair: All right.

Ms. Bell, on clause 7.

Ms. Catherine Bell: This is on clause 7 and also with regard to the letter that Mr. Alhabra mentioned. I actually haven't had a chance to read it. I just got it when I came here this morning.

The Chair: As long as it relates to clause 7, that's fine.

Ms. Catherine Bell: It was brought up under clause 7 that there are some issues. I'm concerned that there are more. I see a lot of numbers here. They're referring to a lot of clauses, and I haven't had time to really consider it.

I just feel that we're going to rush through, and in our haste we won't be able to reference these things back and forth. I urge you to take some time.

•(1045)

The Chair: Okay.

Is there anything else on clause 7?

(Clause 7 agreed to)

(On clause 8—*Liability*)

The Chair: Are there any interventions on clause 8? I'll give you a bit of time. I see a couple of members are trying to get their information on that.

Yes, Mr. Alhabra.

Mr. Omar Alhabra: Thank you, Mr. Chair.

Cross-border damage potential was brought up a lot during the witnesses' testimony. What does the act say about that? What would happen, God forbid, if some of the damage was inflicted across the border?

Mr. Dave McCauley: The act applies to damage in Canada and the exclusive economic zone. It does not apply to damage outside of the country unless it's under an agreement of reciprocity with that country. There would have to be some form of agreement between the Government of Canada and the neighbouring country in which we would provide reciprocal benefits in the event of a nuclear incident that caused damage in the neighbouring country.

Mr. Omar Alhabra: I'm assuming we have a deal with the United States.

Mr. Dave McCauley: Yes, we do.

Mr. Omar Alhabra: So what would happen? I know the act is silent about it, but what would happen under that agreement?

Mr. Dave McCauley: In the event of an incident of the United States that causes damage in Canada, we would have access to the United States' courts and their fund for third party damages. Similarly, in the event of a Canadian accident with damages in the United States, their citizens would have access to our compensation scheme.

Mr. Omar Alhabra: But who would they sue? Would they sue the power producer? Would they sue the government? Would they sue the insurance? Who would be held responsible?

Mr. Dave McCauley: If they were coming to Canada to make their claim, they would be claiming against the operator, because the courts are directed that... Our legislation is the legislation that carries in this area, and the only liable entity is the operator.

Mr. Omar Alhabra: Would it be up to the court to decide if the operator, given the claim, would be responsible to compensate?

Mr. Dave McCauley: Yes, it is the court's decision as to who gets compensation. They would look to the legislation and what that directs.

The Chair: Ms. MacKenzie, would you like to add to that?

Ms. Brenda MacKenzie: Effectively, if there is a reciprocity agreement in place, which there is at this time, then an American victim—God forbid—would be treated like a Canadian; he would seek compensation under this act in the same way that a Canadian would.

Mr. Omar Alghabra: Okay, so the cap and all the limitations of this act would apply?

Ms. Brenda MacKenzie: Yes. It would be just as if that person were a citizen. They have to establish that they really suffered damage as a result of the incident.

The Chair: Thank you for those questions, Mr. Alghabra.

Ms. Bell is next.

Ms. Catherine Bell: Thank you, Mr. Chair.

I will follow up on Mr. Alghabra's questions because I have the same questions in mind.

Is this reciprocity agreement negotiated between the U.S. and Canada at the time, if there's transborder shipping or whatever, or would it be if we have a facility near a border where there might be an accident that impacted communities in the U.S.? If they are treated the same as if they were Canadian citizens, then the company's liability could well exceed the \$650 million, or...?

•(1050)

Mr. Dave McCauley: It would apply, for example, to an installation on the border or that has the possibility of causing damage in the United States.

I believe the reciprocity agreement was entered into back in 1976 or thereabouts. Basically it ensured that U.S. victims would have access to the Canadian nuclear liability scheme, because otherwise they would not have access to this scheme. We wanted to make it available to them on the understanding that we would also have access to the American scheme in the event of an American accident that caused damage to Canadian citizens.

Ms. Catherine Bell: Was that reciprocity agreement updated, amended, or brought into this consideration during the discussions on this bill?

Mr. Dave McCauley: We acknowledge that it exists. I would suggest that perhaps we would use this bill as the basis for looking at our relations with other countries in terms of liability, but we understood as we are developing this legislation that the reciprocity agreement exists today and is still in operation.

Brenda, would you like to make a comment on that?

Ms. Brenda MacKenzie: Yes.

The current reciprocity agreement that you said was apparently entered into in 1976 was, of course, entered into in accordance with the existing legislation, the existing Nuclear Liability Act. Under the Interpretation Act, when the Nuclear Liability Act is repealed and replaced, as this would do, the instruments made under that old act continue, so that is still live and would not be cancelled by the passage of this act. Whether it ought to be updated would be a policy matter.

Ms. Catherine Bell: Okay. That was my question, whether any consideration had been given to looking at that reciprocity agreement and whether it was necessary to update it.

Mr. Dave McCauley: I think the position of officials is that it would probably be worthwhile to look at that reciprocity agreement to see if it needs to be updated, and perhaps to examine as well our

international exposure on nuclear liability and whether we might be entering into other agreements.

Of course, this would have to be done in consultation with the Department of Foreign Affairs, and it would require the authorization of the government.

Ms. Brenda MacKenzie: It's a very good question.

I'm forcing you to jump ahead here—I shouldn't, I know—but you'll note that in clause 74, coming into force of this act is not on royal assent. It is on a day fixed by order of the Governor in Council, which allows the Governor in Council time to reconsider these important instruments made under the act prior to bringing this into force, because it is complex.

Ms. Catherine Bell: Thank you.

The Chair: Okay.

Mr. Boshcoff.

Mr. Ken Boshcoff: Is there an appendix of the reciprocal agreements? Do we have a list of the countries?

Mr. Dave McCauley: There is only one, and it's with the United States. The reciprocal agreement was an exchange of notes between the United States government and the Canadian government. That was brought into force by regulation. So there's actually a regulation that brings that reciprocity agreement into force.

Mr. Ken Boshcoff: The notes seem very general, to make it sound like it could be almost any country. Should we not at least specify that it's the United States?

My concern that I raised earlier, a few days ago, was whether or not some country that fishes in proximity to Canada may find airborne or water contamination and sue us for loss of a fishery, or maybe if some vessel is registered for tourism purposes or something like that, loss of income or direct damages.

•(1055)

Mr. Dave McCauley: I think certainly, as I mentioned, the consideration of whether it would be worthwhile for us to have other reciprocity agreements or agreements of that nature is something that we would be looking at, following our consideration of this new legislation. It's our intent to look at the need for reciprocity agreements with other countries or perhaps look into joining international conventions in this area. So this is a further step. But we were cognizant of that as we developed the legislation.

Mr. Ken Boshcoff: I'm not trying to be a stick in the mud, but wouldn't this be the time to identify Portugal, or Great Britain, or Spain, or someone like that, or Monrovia, if they're the cruise vessel?

Mr. Dave McCauley: I think we are more concerned with getting our own legislation in place, getting the appropriate insurance and compensation regime in place domestically, and ensuring that potential Canadian victims, in the unlikely event of an incident, were addressed, or anyone in Canada.

Actually, the legislation doesn't discriminate between nationalities, and I think, given our proximity to the United States, of course, that was our most important consideration in terms of foreign exposure.

Ms. Brenda MacKenzie: I would just like to clarify that. If you look at the chapeau, or the opening words, of subclause 8(1), that is where it's saying that it applies in Canada and the EEZ. So we may be mixing questions a bit.

The reciprocity agreement is intended to deal with situations where the damage is outside of Canada—because of our proximity, most likely the United States. The legislation itself applies to Canada's territory out to the 200-mile economic zone. So that means the damage suffered by someone in that zone is compensable.

That might be the most relevant to your concern about foreign—

Mr. Ken Boshcoff: I presume that, as drafters of legislation, we're attempting to foresee the unforeseen. So my cause for concern, with no problem, is that when you say we'll take care of it later, I get a certain amount of angst. I'd sooner deal with it now if we're dealing with the legislation.

Ms. Brenda MacKenzie: I wonder if your question is not dealt with already in the legislation, though, because under subclause 8(1),

anybody in the 200-mile zone who suffers damage can be compensated in accordance with the provisions in clauses 13 through to 20.

Mr. Ken Boshcoff: Okay. We'll leave it at that.

The Chair: Thank you, Mr. Boshcoff.

Our time is up for today. Two more people have indicated already that they would like to speak to clause 8, so we'll have to leave that for the meeting on Tuesday.

Thank you very much to the officials for being here today, and thank you all for your cooperation and questions.

I see the chair of the next committee is waiting here. I know he's a mean son-of-a-gun, so we'll let him have the chair.

The meeting is adjourned.

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