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## Standing Committee on Natural Resources

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EVIDENCE

**Friday, August 21, 2009**

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**Chair**

**Mr. Leon Benoit**



## Standing Committee on Natural Resources

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• (1420)

[English]

**The Chair (Mr. Leon Benoit (Vegreville—Wainwright, CPC)):**  
Good afternoon, everyone. We will now proceed with this meeting.

I do want to say that this meeting is on a very important issue. There's no doubt about that. It's a very serious issue. I think it's obvious to everybody.

The reason we're having the meeting is that four members of the opposition, in proper process, have called the committee back. I want to read the terms as laid out in the letter from the opposition so that it's clear to everyone, members of the committee and witnesses, what we're here to discuss today and what we're not here to discuss today.

So I'll just read the notification that we got from opposition members asking for this meeting, as follows:

We the undersigned members of the Standing Committee on Natural Resources request that a meeting of our Standing committee be convened, pursuant to Standing Order 106(4), in order to study the prolonged closure of Atomic Energy of Canada Limited's NRU reactor at Chalk River, which has resulted in the decrease of supply of medical isotopes and a worsening health crisis, as well as the future of isotope reduction in Canada.

It's important to note that we are not the health committee, we are the natural resources committee. We're here today to discuss these issues as laid out in this notice from members of the opposition. We are not here to discuss health issues that are more appropriately handled by the health committee. Let's proceed on that basis.

I will explain who the witnesses are for this first panel, which goes until two o'clock.

We have with us, in person, Michael Ivanco, president, Society of Professional Engineers and Associates.

Thank you, Mr. Ivanco, for being here today. We appreciate it very much.

We also have, by video conference, Robert Atcher, president, International Society of Nuclear Medicine, and Sandy McEwan, special adviser on medical isotopes to the Minister of Health.

Welcome to all of you.

First of all, Mr. Ivanco, you can start with your opening statement. Then we will proceed, in the order that they appear on the notice, to Mr. Atcher next and then Mr. McEwan.

Go ahead, please.

**Dr. Michael Ivanco (Vice-President, Society of Professional Engineers and Associates):** Thank you.

My name is Michael Ivanco. I have a Ph.D. in physical chemistry. I'm the vice-president of the Society of Professional Engineers and Associates.

With me today is Peter White, who's president of SPEA. He happens to be an expert in safety analysis, and he is an engineer.

SPEA represents over 900 scientists and engineers who work for Atomic Energy of Canada at Sheridan Park. Our members design the nuclear reactors used in Canada and around the world for nuclear power stations, for research, and for production of medical isotopes. Our members also provide technical support, safety analysis, and a wide range of services for the nuclear industry. We also work closely with the technicians and technologists who provide fabrication, inspection, and testing on a variety of aspects in the nuclear industry.

I'm honoured to be invited here to speak to you about nuclear science. I'm very proud to represent the scientists and engineers who work at AECL and whose qualifications are too many to list. A great number of our members have advanced degrees in a wide variety of specialties, and they've been internationally recognized as experts in their respective fields.

I've worked in the nuclear industry for 24 years, the first 12 at Chalk River Laboratories. I've been at Sheridan Park, at the commercial division in Mississauga, for the last 12 years. My areas of expertise include laser isotope separation, analytical measurement, and product development ranging from heavy water upgraders to reactors serving the maintenance systems.

The majority of our members do not directly support operation of the NRU reactor in Chalk River, but many of them were involved in the life extension beyond 2000 and also in the design and construction of the MAPLE reactors that were meant to replace it. Technical questions regarding the design, repairs, and operability of these reactors are probably best left to management representatives, who are appearing later. They can draw from the expertise of individual members, both our members and those who work at Chalk River, whom we do not represent.

I think Canada has every reason to be proud of the people who've helped make Canada an internationally recognized leader in the production of medical isotopes and nuclear technology, and also the safe, peaceful use of nuclear reactors for the production of electricity. Canada is one of only five nations in the world that can deliver a reactor project anywhere, and it's something we should be proud of.

Much of the success is owed to the support provided by successive federal governments, who have demonstrated their confidence in AECL by providing necessary investments to enable the development of research and designs that could in turn be sold to domestic and international customers. This level of support and the tangible and intangible benefits it has generated has been the subject of many debates in the House of Commons and the subject of countless news articles and commentaries. I hope to avoid repetition of those debates here today, but I won't shrink away from declaring the position of our over 900 members, the related 30,000 jobs in Canada's industry, and the hundreds of thousands of family members, friends, and the Canadian public who support them.

Canadians should be proud of our role in providing medical isotopes, nuclear services, and reactors for peaceful purposes. We've profited from this research and innovation. Canada should continue to support AECL to ensure domestic supply of medical isotopes for Canada and the world, we believe, and we should continue to support AECL to successfully complete the design and generate sales of our newest product, the ACR-1000.

We must look at this as an investment by Canadians in an industry that has paid many dividends. The research that is conducted by AECL benefits Canadians and has established us as a world leader. There are few industries where all aspects are conducted in our own borders. This is the only industry I can think of in Canada where we dig the uranium out of the ground, we refine it, we turn it into fuel, we put it in reactors that we design, build, and make almost all the parts for, and then provide services for. There's no other industry like it, and few people appreciate that.

There has been much said about the sale and privatization of AECL. For the record, our members believe that a sale is likely detrimental to the national interest. We believe that nuclear technology should not be under the control of corporate interests but held by Canadians through their government.

I'd like to point out that the main shareholder of Areva, one of our main competitors, is the French government. It's a fact that escapes many critics of AECL. Areva has been successful in producing and selling its reactors, but it has also had its share of delays and problems with multi-billion-dollar cost overruns in Europe. I raise this only because Canadians have been led to believe that delays and cost overruns are somehow unique to AECL. They're not. As I pointed out earlier, or should have pointed out, the nuclear industry is not a production line company. In our industry, we can't afford a product recall.

Canadian technology is considered among the best in the world. We have an exemplary safety record in this respect.

• (1425)

As this committee is focused on the isotope issue, I'd like to urge you to consider the broader picture and what Canada's role should be in the nuclear industry. The isotope issue is extremely important but is just one aspect of the nuclear industry. We also need to have a discussion on the future of this industry, because that is indeed the question before you. If there's not a thriving industry, there is no isotope issue; we simply would have no isotopes, or we'd be buying them from somebody else.

**The Chair:** Thank you, Mr. Ivanco, for your opening statement.

We now go to Mr. Robert Atcher, president of the International Society of Nuclear Medicine. Again, it's by video conference.

Go ahead, please, Mr. Atcher.

**Dr. Robert Atcher (Past President, International Society of Nuclear Medicine):** Thank you, Mr. Chairman.

I want to make one correction: I'm the immediate past president of the Society of Nuclear Medicine, and Michael Graham from the University of Iowa is our current president. But I have been tasked, starting with Dr. McEwan's presidency, with leading a task group responsible for addressing the problems we've been having with the supply of these critical medical isotopes.

My background is that I have a Ph.D. in nuclear chemistry and I'm a radiopharmaceutical chemist. I work at Los Alamos National Lab and I have a joint appointment in the College of Pharmacy at the University of New Mexico.

I want to address specifically some of the issues associated with the outage at the NRU at Chalk River. Approximately 50% of the material that we use in the U.S. is produced by that reactor, and it presents a huge problem for us whenever that reactor is not functioning.

In addition, that reactor also has more excess capacity than the other four reactors currently producing 95% of the world market of molybdenum-99. So whenever any of those other reactors go off-line, the NRU has the capacity to make up for a substantial percentage of the market it supplies. So there's a double whammy whenever the NRU goes down; not only is its normal production lost, but also the excess capacity this reactor produces when the other major reactors in the world are off-line.

Of the imaging procedures we do in nuclear medicine in the United States, 80% use technetium-99m, the daughter product of molybdenum-99. These procedures include cardiac studies and cancer studies, which in our case are about 80% of the imaging procedures. And then we do a number of other procedures for gastrointestinal problems, genito-urinary problems, and other issues associated with neurological problems, infection, etc. So we are imaging patients across the board using nuclear medicine procedures—in particular, nuclear medicine procedures utilizing this critical radioisotope we get from the reactor at Chalk River.

One of the problems with not having technetium-99m available is we then have to use other imaging procedures, which present one of four complications as far as the patient is concerned. One is that the radiation dose they receive from the procedure is higher. Another is that the accuracy of the procedure isn't as good as the one we would get from using a technetium-based imaging procedure. We've also seen an increase in cost as a result of the technetium-99m not being available. Finally, in many cases we use a much more invasive procedure, which presents a danger to the patient of increased morbidity and, potentially, mortality.

In the U.S. in particular, we have a problem because we use a technetium-based radiopharmaceutical to do bone scans of patients who have lung cancer, breast cancer, and prostate cancer and have a very high likelihood that the cancer may spread to the bone. We have asked our centre for medicare and medicaid services to cover sodium fluoride PET imaging for bone scans, but to date we have not received permission to charge for those procedures. So for those patients with these critical cancers, we currently don't have any alternatives in terms of imaging procedures.

In addition, for patients with breast cancer, we use a technetium-based test to find the lymph node that's closest to that tumour so that the surgeon can excise that lymph node, send it to pathology, and determine whether it has spread beyond the primary tumour in that patient. If we detect there is such a spread of that cancer, those patients go on to chemotherapy and other procedures to try to keep that cancer under control. So it's a very important part of the staging procedure for patients who are undergoing surgery for a tumour.

In addition, for cardiac patients who are obese, we get much better imaging procedures from using technetium-99m than we do from an alternative radioisotope, thallium-201.

• (1430)

Finally, pediatricians have expressed concern about the impact on a program called Image Gently in the U.S., which tries to reduce the radiation dose the pediatric population gets from imaging procedures. Those patients who are not availed of a technetium-based radiopharmaceutical for their imaging procedures often need to have procedures that involve much greater doses and much less accuracy as far as their staging goes. So another critical population is impacted by having this material not available.

So that in summary gives you a clear idea of the U.S. practice of nuclear medicine, the problems we have when a reactor such as NRU goes offline for what appears to be an extended period of time, and the problems associated with the alternatives we are looking at in using the technetium-based imaging procedures.

Thank you.

• (1435)

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

We'll go now to Sandy McEwan, special adviser on medical isotopes to the Minister of Health.

Mr. McEwan, if you have an opening statement, please go ahead.

**Dr. Sandy McEwan (Special Advisor on Medical Isotopes to the Minister of Health, As an Individual):** Thank you, Mr. Chairman. I will be brief.

As you have identified, I'm the special adviser to the Minister of Health. My day job is as chair of the department of oncology at the University of Alberta. I'm also a previous chair of the department of radiology at the same university. I'm a nuclear medicine physician with an active therapeutic practice at the Cross Cancer Institute in Edmonton. I'm Dr. Atcher's predecessor as president of the International Society of Nuclear Medicine. I'm also a past president of both the Canadian Association of Nuclear Medicine and the Canadian Society of Nuclear Medicine.

As Dr. Atcher has correctly identified, there is an impact on our patients caused by the shutdown of Chalk River. Since the initial shutdown at the end of 2007, the community has had a working group in place that includes members of the nuclear medicine community, the oncology community, the cardiology community, as well as members of Health Canada, looking at ways of ameliorating the crisis. We have attempted to provide guidelines for our clinical colleagues on how to best utilize available resources. I think that the guidelines we have published and continue to modify have helped to ameliorate the impact of this on our patients.

In particular, we have recognized the importance of providing as accurate a guideline as we can of the supply of molybdenum. One of the key issues at the beginning of the shortage was the unreliability of this supply prediction. Over the last four to six weeks we've been able to provide a more consistently reliable guide to our clinical colleagues on the supply of molybdenum and the generators, and a more consistent expectation of what will be happening in the following week. This has helped to improve planning, patient flow, and the way our clinical colleagues have managed their departments and changed processes.

Now that we've survived the shutdown at Petten over August, with perhaps less disruption than we feared, we have to look to the medium term. AECL has indicated that it expects to be up and running in the first quarter of 2010. Our hope is that it is up and running before the planned six-month shutdown of Petten at the end of February.

We think it's important that we now start to again understand what the implications of the AECL startup are going to be. We really need to understand what regional disparities are occurring in the country. Some parts of the country have experienced very little disruption; some parts of the country have experienced significant disruption. One of my key tasks is to understand what those regional disparities are, what is causing them, and what we can do to help.

I think it's important to recognize the degree to which the community has made very significant changes to work practices to deal with the shortages, and the very significant involvement of all members of the community in ensuring that we can actually continue to supply our patients. We hope we will be able to continue the accurate indication of future supply, and we look forward to confirmation of when AECL will be able to reopen NRU.

Mr. Chairman, thank you for the opportunity to speak.

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

We'll go directly to questioning now so that we can get in as many questions as possible, starting with the official opposition.

Mr. Regan, you have up to seven minutes.

**Hon. Geoff Regan (Halifax West, Lib.):** Thank you, Mr. Chairman.

Dr. McEwan, first of all, I understand that you're no longer a member of the Canadian Association of Nuclear Medicine. Who do you represent?

**Dr. Sandy McEwan:** I'm a member of the Canadian Society of Nuclear Medicine, which is the overarching body representing nuclear medicine in this country.

•(1440)

**Hon. Geoff Regan:** Would you say you represent that organization, or the doctors?

**Dr. Sandy McEwan:** I think I was appointed as special adviser to the minister because of the significant national and international expertise I have, my expertise in the field of nuclear medicine, the fact that I have breadth of knowledge through nuclear medicine and through pathology.

**The Chair:** Did you have a point of order, Mr. Anderson? Okay, I guess it has been dealt with.

Go ahead, Mr. Regan.

**Hon. Geoff Regan:** Dr. McEwan, you're aware, I presume, of the motion unanimously passed by the Canadian Medical Association this week as it relates to medical isotopes. Do you agree with it?

**Dr. Sandy McEwan:** Which of the five motions?

**Hon. Geoff Regan:** It has five different points in it. Are there some you disagree with and some you agree with?

**Dr. Sandy McEwan:** If I can go through the motions in order, it might be helpful.

In regard to the first motion, as a clinician I am obviously supportive of this motion.

On the second motion, I believe we have attempted to have very broad representation in our consultation with the nuclear medicine physicians. The Canadian Association of Nuclear Medicine was actively involved in my appointment and in the conversations around my appointment, and Dr. Urbain was on the panel that agreed to my appointment.

I think the investment is important, and we have clearly started seeing that. The CIHR and the NRCAN panel are important elements of that item. I think the motion that was proposed by the president of

the CMA, recognizing and appreciating the responses of the clinical community, is appropriate and I enthusiastically endorse that motion.

I think the final motion, which is looking at new technologies and, most importantly, new ways of producing technetium-99m, which may not necessarily be reactor-based, is a very important one, and clearly this is now before the NRCAN panel.

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

Dr. McEwan, I don't know if you addressed the motion about MAPLE nuclear reactors. The Canadian Medical Association urged the government to have a panel to thoroughly review the decision to cancel the MAPLEs project.

**Dr. Sandy McEwan:** My understanding is that it is part of the mandate of the NRCAN expert panel. I have some knowledge of nuclear physics. I am not a nuclear physicist, and I certainly am not competent to discuss any specifics around that. I'm hoping that the NRCAN expert panel will provide sound advice on that.

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

You're of course aware that on November 18, 2007, the National Research Universal reactor was shut down, and the shutdown was for approximately a month. At that time, you described the shutdown as "a catastrophe for patients". Of course, the NRU has been shut down now since May 14, so over three months, and we're hearing that it's going to go on until sometime in the winter or spring, or it sounds that way at least. How would you describe the situation today?

**Dr. Sandy McEwan:** The situation for our patients is of great concern. I think we have learned a great deal from the 2007 shutdown. The working group that we have had going pretty much consistently since that initial shutdown has come up with sound advice, has come up with creative advice for our clinical colleagues on how to deal with the shortages. Without the role of that working group, we would not have seen hospitals able to cope as well as they have.

As I indicated in my opening statement, I am very concerned that there do appear to be significant regional disparities in how hospitals are able to cope. If you look at the data I have, hospitals in the west are dealing with it perhaps a little better than some of the smaller urban centres in Ontario and Quebec. That is of concern to me. It has been the basis of a number of conversations I've had with Dr. O'Brien, who is the president of the OANM, and I'll be continuing to try to understand where those disparities come from and what we can do to ameliorate them.

•(1445)

**Hon. Geoff Regan:** Mr. Chairman, I'll continue with the last question I have—unless we have time for more.

**The Chair:** You have a minute and a half. Go ahead, please.

**Hon. Geoff Regan:** Given the fact that AECL's board of directors had already made a recommendation to the minister to shelve the MAPLEs, the MAPLE project, prior to the 2007 shutdown of Chalk River, is it your view that the government should have begun coming up with a plan B to deal with the production of medical isotopes at that time? We had, of course, a month-long shutdown then, and one would think it suggested the possibility that it could happen again.

**The Chair:** Mr. McEwan, go ahead.

**Dr. Sandy McEwan:** Mr. Chairman, I was not aware the AECL board had made that recommendation that early.

I think there is clearly hope that the NRU will come up in the first quarter of this year.

The proposals I am aware of that have gone to the NRCan expert panel look creative. Many of them provide made-in-Canada solutions, and I'm looking forward with a great deal of enthusiasm to the report of that panel.

Mr. Chairman, as you know, I will be appearing before that panel on September 9.

**Hon. Geoff Regan:** One last question?

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

We go now to Bloc Québécois and Madame Brunelle; and if there is time left, we'll go to Monsieur Malo.

[*Translation*]

**Ms. Paule Brunelle (Trois-Rivières, BQ):** Thank you, Mr. Chairman.

We are meeting here today because there is a shortage and the situation is urgent. Government inaction this summer has resulted in the deterioration of patient health. Physicians and nuclear medicine specialists have characterized the situation as catastrophic. According to Dr. François Lamoureux, president of the Association des médecins spécialistes en médecine nucléaire du Québec, the government is overwhelmed.

Mr. Ivanco, you told us you were proud of the support that our government is providing to the nuclear industry. It seems to me that government support, whether it's from the current government or the previous government, has declined over the years. You're telling us that Canada is a world leader, but the Prime Minister tells us that he wants to abandon isotope production. How do you think we can maintain our position?

You say you're a nuclear specialist. A number of witnesses have told this committee about restarting the MAPLE reactors. Some say they are in favour of that option and others not. What is your opinion on the issue? Is it possible to restart them? Have the MAPLEs produced isotopes? Do you think this is a solution for the future?

[*English*]

**The Chair:** Mr. Ivanco, go ahead.

**Dr. Michael Ivanco:** There were a number of questions there. One of them was whether it is feasible to restart the MAPLE reactors. I don't specifically work on MAPLE technology. All I can tell you is that I know credible technical experts on MAPLE technology within my company that I work for who have come out very strongly—and one recently vocally in the press, I think it was in *The Globe and Mail*—making the argument as to why they couldn't be restarted in a timeframe reasonable to deal with the isotope crisis. I know that those people who are saying these things are not saying them because they have to say them, but because they genuinely believe this way, so I have to defer to their judgment. I do not believe they are lying when they say these things. I believe they're telling the truth.

You asked another question, I think, about whether support for the industry was sufficient. Did I understand that correctly?

[*Translation*]

**Ms. Paule Brunelle:** I talked about federal government support. You say you are proud of the federal government's support. It seems to me instead that the government lacks vision and is seeking to withdraw at least from isotope production.

[*English*]

**The Chair:** Mr. Ivanco, go ahead.

**Dr. Michael Ivanco:** The government of the day has been supportive certainly of my employer, in the sense that it has given them considerable funds over the last year and a half to complete the ACR-1000 design. We appreciate that.

As I try to mention, the issue of isotope production, when you look at it from an industry perspective, is just one thing. Most people don't appreciate that the NRU was built as a reactor not to make isotopes, but to carry out physics experiments, to test fuel, and to do those kinds of things. The nuclear medicine business was developed over a period of time.

The bigger issue, I think, for us in the industry is that we would like to see an NRU replacement down the road, not just for isotope production, but also because a viable industry needs to have a research reactor. I don't believe the support is there for that. I think that starting the isotope production reactors—if it's possible to start the MAPLEs—would solve that particular issue, but it wouldn't solve the bigger issue, which is to have a viable industry.

Personally, no one likes to say that so much money is not enough. I think there has been money there for certain projects, and it's appreciated; but an investment in a research reactor is a 40-year investment in the future. It's an investment in physics research; it's an investment in isotopes; it could be an investment in many things. It could cost a billion or a billion and a half dollars, but we gave the auto companies \$10 billion that we may never see again. This would be a billion or billion and a half dollars that would keep on giving.

• (1450)

**The Chair:** Madame Brunelle, you have just over two minutes left.

[*Translation*]

**Ms. Paule Brunelle:** Mr. Chairman, I'm handing over the rest of my speaking time to Mr. Malo.

**Mr. Luc Malo (Verchères—Les Patriotes, BQ):** Thank you very much, Mr. Chairman.

A little earlier, I listened to Dr. McEwan speaking with my Liberal colleague. As Dr. McEwan no longer belongs to the Canadian Association of Nuclear Medicine, he clearly cannot speak on behalf of that group of physicians. What most physicians in the field, who are practising in these somewhat peculiar conditions of isotope shortage, tell us is different. Their overall vision of the problem is much more realistic. Dr. McEwan seems to have a much more positive vision. I simply wonder how he can be so cheerful about this situation.

On August 12, the Minister of Health and the Minister of Natural Resources outlined 22 proposals that were going to be studied by the expert review panel on isotope production. I would like him to tell us what those proposals are. We haven't really heard about them.

In addition, in view of the highly precarious and urgent situation our specialists have to face, and of all the limitations caused by the isotope shortage facing patients, is it realistic not to table a report on those proposals until November?

[English]

**The Chair:** Dr. McEwan, would you like to answer that?

**Dr. Sandy McEwan:** Mr. Chairman, if I can respond to that, I find it offensive that he would regard my comments as jovial. They are not jovial. I recognize the importance of this to my patients. I practise and I see patients every day. I am actually in the middle of a clinic. I have come out of that clinic to come to talk to this panel, so I find his comments unfortunate.

The degree to which there are regional differences across this country is very, very real. When we talk to the provinces and territories at our meetings, we have an indication from them both of the degree to which there are delays in tests and the degree to which there are cancellations of tests. The provinces and territories, from their health ministries, are reporting that there are manageable delays. These are clearly not entirely acceptable for our patients, but are manageable.

What is clear to me, as I talk to my colleagues on the ground, is that there are these big regional disparities across the country. The sites that appear to have the biggest difficulty coping are small urban sites dependant either upon small radiopharmacies or upon a generator being supplied to an individual hospital radiopharmacy. Clearly, that is a very great concern to me and the physicians dealing with those patients. What I now have committed to do with my colleagues is actually to understand what is causing those regional disparities.

So, Mr. Chair, I believe I do understand the seriousness of it. I am a practising physician on the ground and am actually in the middle of a clinic as we speak. I do understand the regional disparities and I am attempting to address them. I am not underestimating the impact on patients.

•(1455)

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

*Merci*, Madame Brunelle and Monsieur Malo.

We will go now to Mr. Cullen for up to seven minutes.

I understand, Mr. McEwan, that you have to leave very close to three o'clock. If you must do that, just leave when you feel you have to.

Mr. Jean, go ahead.

**Mr. Brian Jean (Fort McMurray—Athabasca, CPC):** Mr. Chair, I have a point of clarity.

Madam Brunelle asked a question of Mr. Ivanco in relation to the MAPLE reactor. Mr. Ivanco responded that he agreed with the experts in recent articles. I am wondering if he was specifically referring to the article by Jean-Pierre Labrie in the *National Post* on July 28, 2009.

**The Chair:** Mr. Ivanco, is that the article you were referring to?

**Dr. Michael Ivanco:** It's the only public explanation or articulation that I've seen.

**The Chair:** Thank you.

That was a point of order.

Go ahead, Mr. Cullen.

**Mr. Nathan Cullen (Skeena—Bulkley Valley, NDP):** Before I get started, I'm not sure if that was a point of order or something Mr. Jean could have asked in his questioning.

**The Chair:** You get seven minutes, Mr. Cullen. Go ahead.

**Mr. Nathan Cullen:** Thank you all for being with us here today, particularly Dr. McEwan, who is taking time out from a clinic.

Dr. Atcher, you spoke of the effects on patients. You mentioned three specific things. You said that this isotope shortage is having an effect on patients seeking cancer treatment and diagnosis of heart conditions. You talked about the accuracy of the tests being less than perfect. You talked about an increase in radiation causing health effects on the patients as well. You talked about the procedure itself being riskier.

Did I understand you correctly?

**Dr. Robert Atcher:** That's correct.

**Mr. Nathan Cullen:** I'd like to turn to Mr. McEwan, because he talked about having to leave quite soon.

I want to take you from your comments in May of this year to your comments just recently. You talked about this being a catastrophe for patients, but from May until now the isotope shortage has increased. You talked about offering creative advice. You talked about the ability to triage the emergency and the crisis in isotope care much better.

I'm wondering what the basis is for your enthusiasm. Considering how long this crisis will continue with the shutdown at Chalk River, where do you find enthusiasm for cancer and heart patients in Canada in the future months?

**The Chair:** Mr. McEwan, go ahead.

**Dr. Sandy McEwan:** Thank you, Mr. Chairman.



I agree with you that the length of the shutdown and the length of the supply issue are of concern. We have improved the utilization of the available supply in a number of short-term ways, and we have been able to keep patient volumes up better than we had originally envisaged. Clearly this is not sustainable over the long term. It is going to create problems for hospital staff, as they're working different processes and different patents.

I believe there are some opportunities. The approval of the molybdenum from the Australian reactor may provide us with some medium-term relief in molybdenum supply. We have to remember that reactors also make iodine-131, which is essential in the treatment of patients with thyroid cancer, which is my own area of expertise.

**Mr. Nathan Cullen:** When we get to offering Canadians confidence that these tests will be there for them in the future, we hear terms like “may”, “perhaps”, and “there might be supplies available”. To families and individuals dealing with the tragedy of having to go through cancer and heart diagnosis, that doesn't help very much.

To this point, our hospitals have been able to triage the situation and make do over a short period of time. We now hear from the government that this shutdown will last many months longer than first predicted.

You talked earlier about becoming more reliable and consistent in your estimations, but it seems to the public that you've just pushed back the opening of a possible reactor further and further. While that's being reliable and consistent, it's hardly being helpful or hopeful.

There's the suggestion that Australia can pick up the tab and fill in, and hospitals can continue to scrape together some sorts of solutions. We heard from Dr. Atcher that the accuracy of tests are much less, the radiation doses are much higher, and the procedures are much riskier. How long can Canadians expect to have no plan available from this government, other than a report that you might issue towards the end of the year, many months from now? I'm still trying to find where the competence is for this, as someone practising the medicine yourself.

• (1500)

**The Chair:** Go ahead, Dr. McEwan.

**Dr. Sandy McEwan:** Mr. Chairman, I will remind the member of the committee that I am not a member of the government, I'm an adviser to the minister. My requirement is to provide advice on dealing with the crisis, and I believe I am doing that to the best of my ability.

When I look across the country, certainly in Alberta we are coping very well indeed. When I talk to my colleagues in small urban Ontario, I know they're having more difficulties.

If the NRU is going to be down, we have to find alternatives. In terms of alternatives we have found, iodine-131 from South Africa is approved and is now in routine use, and we have not seen any significant disruption in the treatment of patients with thyroid cancer.

The government—

**Mr. Nathan Cullen:** Then, Doctor, I wonder if—

**The Chair:** Mr. Cullen, please give the doctor a chance to answer the question. He hadn't finished.

**Mr. Nathan Cullen:** I thought he had paused and stopped.

**The Chair:** Okay. By video conference, it's a little bit difficult.

**Mr. Nathan Cullen:** I understand there's a delay. I heard a pause and thought that response was over, so I'm continuing with the rest of my questions.

**The Chair:** But I do want the doctor to have a chance to finish. Thank you.

Go ahead, Dr. McEwan.

**Dr. Sandy McEwan:** We have to look at the best options we can for our patients. We are looking, through CIHR, at alternative radio-pharmaceuticals. We have approved fluoride for bone scanning. In my own hospital, we have now moved 50% of our bone scans to fluoride so we can free up technetium for other tests. Thallium is a very effective test for cardiac imaging. It was the standard of care for many years. People are rediscovering that it is actually a pretty good test. But we clearly have to look at other alternatives.

**Mr. Nathan Cullen:** I just worry because some of the alternatives that are being suggested we know don't fit the entire population. Some of the tests that you said are reliable alternatives don't actually assist in diagnosing the same ailments in children and other places.

Lastly, Doctor, as we asked previous folks dealing with this issue, is there anybody who understands where the shortage levels are in the country right now? Is there anybody who is collecting the data to understand where patients are waiting longer, where certain tests are not available, and what the total supply level of isotopes in Canada is? Do you or anyone you're working with have that information for Canadians?

**Dr. Sandy McEwan:** There is a weekly bulletin put out on supply levels for the following week. That is now proving to be remarkably accurate and to help hospitals plan.

The use of alternative tests frees up technetium for those patients in whom the alternative tests are not appropriate. For example, regarding fluoride bone scanning, I would not do fluoride bone scanning routinely in children. It's a very effective test in patients with cancer, so for every patient for whom I use fluoride, I free technetium for somebody else who can't have fluoride.

We are currently getting from the provincial and territorial ministries fairly accurate listings of what the test delays are in each province, so I think the answer to the question is that we are providing that information. I am provided that information, and I believe the provinces and territories also have it.

• (1505)

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

We will go now to the government side.

Mr. Allen, you have up to seven minutes.

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

I would appreciate it if Dr. McEwan could stay a couple more minutes.

I appreciate the fact when he said that now that Petten is back up we've fared a little bit better than we expected and that the accuracy of the supply data is getting better, but I want to pick up on one of Mr. Malo's points here on the regional disparities. We've referred to that before.

Doctor, you were talking about looking at an assessment of those regional disparities. Can you elaborate a little bit on what your game plan is for that assessment and when you might have that done? Presumably, with the NRU going out into the first quarter, we're going to continue to have these regional issues. How do we get a handle on those?

**Dr. Sandy McEwan:** My game plan is, I guess, a three-step plan. The first step is to increase my conversation with AMSMNQ and with the OANM, because those are the two areas where these regional imbalances are occurring. The second step is to work with the provinces and territories to try to get a handle on what their understanding of the disparities is. The third step is to continue to expand my conversations with individual sites to understand how individual sites are faring. I've had a small number of conversations and intend to continue doing that.

**Mr. Mike Allen:** Do you have a timeline as to when you're looking to finish that assessment?

**Dr. Sandy McEwan:** I'm hoping to get as much of it done as I can. The minister will be meeting with the provincial and territorial ministers of health in September, and I think it would be very helpful if I could have at least a somewhat clearer understanding in advance of that meeting.

**Mr. Mike Allen:** Okay, thank you.

In terms of the national picture on the PET scanning, you've talked a little bit about alternatives. Of course, we've heard in some of our previous testimony that PET scanning is an option as well. Have provinces that have used it coped better during this shortage, and how have they coped better?

**Dr. Sandy McEwan:** Mr. Chairman, those data aren't in yet.

**Mr. Mike Allen:** Okay.

The next question is, based on the alternatives that you're using, at this point in time, what percentage of these treatments would you say are using other technologies? Do you believe that some of these can continue into the future or that as soon as the NRU is back and we have the supply of the isotopes, we will be going right back into the molybdenum and technetium?

**Dr. Sandy McEwan:** That actually is a very complex question. I think there's no doubt that we have learned from this supply shortage that the business model we have used in nuclear medicine is perhaps imperfect. I think that if we try to look at the tests that can be utilized as alternatives, there are some PET tests. Thallium is an effective test for cardiac imaging in perhaps 50% or 60% of patients. There is a PET cardiac test that we need to look at going into the future. Clearly, there has been some shift to non-nuclear-medicine-based testing as well. So I think that as this goes forward there will be a

complete re-evaluation of the way in which we offer nuclear medicine services.

**Mr. Mike Allen:** Thank you, Doctor.

Dr. Atcher, I'll pick up on some of your comments earlier on the entry of the U.S. into the medical isotope industry. How do you figure it's going to change the situation we have now? Can you elaborate a little bit on that discussion?

**The Chair:** Dr. Atcher, go ahead.

**Dr. Robert Atcher:** Thank you.

One of the things we have been discussing since the outages at NRU and now Petten, briefly over the last month and potentially four to six months in 2010, has been how we can address the rather substantial problems associated with these outages. We recently did a survey of our membership and determined that 80% of them say that they currently have had an impact based on the outage at NRU and at Petten, and many of them have no alternative sources. Some 53% said that they had no alternative source of the molybdenum-99-based generators.

So one of the things we have been trying to work with—and I just came from a meeting of an intergovernmental group here in the U.S. that is proposing to look at some alternatives to help in the short term with the shortages—is to use reactors based in the United States to irradiate targets, which would then be shipped to Chalk River for processing. That's one option.

One thing to keep in mind is the fact that we have plenty of reactors in the U.S. and around the world that are capable of irradiating these targets, but we have a limited number of sites that are capable of processing those targets, removing the molybdenum, and producing a quality of molybdenum that's qualified for use in humans. In particular, those sites have to be approved by the FDA in the U.S. and the TGA in order to have that material used in human imaging. So it's the processing facilities that turn out to be the bottleneck.

Of course, when a reactor the size of NRU is off-line, it creates a serious problem for us, as I mentioned, not only for the supplies that we routinely get from it, but also for the excess capacity that we can take advantage of when one of the other reactors is off-line.

• (1510)

**The Chair:** Mr. Allen, you have another minute.

**Mr. Mike Allen:** Okay, I have just one really quick question, then.

Following up on that, Dr. Atcher, by putting the targets in these reactors—you have the reactors—are there any licensing issues that would mean it might not necessarily be a short-term solution because you are introducing something else into the reactor core that's different?

**Dr. Robert Atcher:** In some cases we would have to get permission from the Nuclear Regulatory Commission to engage in that activity, but we have been briefing the commissioners of the NRC on the crisis that we have at the moment and on some of the potential solutions, so they've been engaged in the conversation as we've been exploring some of these alternatives. There are, however, as you point out, regulatory issues in terms of irradiating those targets and then moving those targets to Canada for processing.

**The Chair:** Thank you, Mr. Allen, and thank you, Dr. Ivanco, Dr. Atcher, and Dr. McEwan, for your very helpful information.

We will now suspend just for a couple of minutes—maybe three or four minutes—as we change witnesses.

• (1510) \_\_\_\_\_ (Pause) \_\_\_\_\_

• (1515)

**The Chair:** We will reconvene the meeting with our second panel for this afternoon.

We have here in this next hour Hugh MacDiarmid, president and CEO of AECL, and Bill Pilkington, senior vice-president and chief nuclear officer of AECL.

Thank you very much, gentlemen, for being here today. We have to stop meeting like this or people are going to start talking. You've certainly been here a lot in the past year and a half, and I do appreciate your giving us this very important information.

If either of you has an opening statement, please go ahead. You have up to 10 minutes.

**Mr. Hugh MacDiarmid (President and Chief Executive Officer, Atomic Energy of Canada Limited):** Thank you, Mr. Chairman.

[Translation]

Thank you, Mr. Chairman.

I would like to introduce Mr. Bill Pilkington, the Chief Nuclear Officer for AECL.

[English]

**The Chair:** Excuse me for a minute, Mr. MacDiarmid.

Could we have the activity in the corner here disappear? If you'd like to, you can resume out in the foyer or somewhere like that, but let's give our full attention to the witnesses and to the committee proceedings.

I'm sorry for interrupting, Mr. MacDiarmid. Go ahead, please.

**Mr. Hugh MacDiarmid:** That's quite all right, Mr. Chairman.

[Translation]

Thank you, Mr. Chair.

Allow me to introduce to you Mr. Bill Pilkington, Chief Nuclear Officer with AECL.

[English]

Let me begin by expressing my own concern about and acknowledgement of the impact of the ongoing strain on the supply of medical isotopes across Canada and around the world. We are

obviously following the news of the shortage very closely and we have daily reminders of the urgency and importance of our mission. We deeply regret the all-too-real consequences of the shutdown of our Chalk River facility. Nowhere is the deep sense of duty to remedy this situation felt as acutely as it is among the men and women of AECL, and most especially among the talented and dedicated employees at the Chalk River facility who have been working around the clock since the outage occurred in May.

As our work has progressed, we have conducted ourselves with the greatest possible transparency. We provide proactive disclosure of our progress on a weekly basis. I have directed that there be clear milestones and reporting of progress against those milestones. This is a project where there continues to be full communication with all of our stakeholders.

We in fact published our 17th status report on August 19. In that update we provided guidance on the duration of the shutdown. This guidance continues to be founded on the best evidence available, including the most up-to-date analysis of the inspection data, progress on repair strategies, and critical path requirements for restart after an extended shutdown. At this time, the selection of the band of weld buildup technique allows us to project that the NRU will return to service during the first quarter of 2010.

The Canadian Nuclear Safety Commission's approval will be required prior to AECL's refueling the reactor. As a result, AECL and the CNSC signed the Protocol for the NRU Restart Licensing Activities on August 14. The protocol outlines the administrative framework, milestones, and service standards for the licensing activities required for restarting the NRU reactor. It is posted at [www.nrucanada.ca](http://www.nrucanada.ca). This protocol ensures, in that same spirit of transparency, that the full regulatory review process is followed, and when the NRU returns to service, it will operate safely while once again producing isotopes.

To recap our return-to-service plan, we have developed a three-phase program.

The first was to do a condition assessment of the reactor and to select a repair technique. We have completed this phase, but will continue with confirmatory inspection and analysis. Testing of the repair process and special tools will be carried out in the full-height mock-up now constructed in the former NRX facility at Chalk River Laboratories. The mock-up is now being used to test the specialized tools designed to perform vessel cleaning and the removal of material samples for analysis.

The second phase, of course, will be effecting the repair itself. We are using proven technology. A key challenge is accessing the repair sites through a 12-centimetre aperture that is a distance of nine metres away, all performed in a radioactive environment. This requires considerable expertise in designing specialized tooling and conducting training within a full-scale mock-up environment.

Finally, the third phase will be returning the reactor to service, as I mentioned, with the full oversight of the CNSC.

These three phases interlock and overlap to some degree. This approach ensures that we will get this reactor back into service as soon as we possibly can.

I want to state unequivocally our belief that the NRU can be repaired and is indeed well worth repairing. It is very clear in our minds that the repair program is the best available option for continued supply of medical isotopes to patients. We already anticipate looking to renew the current operating licence of the NRU for a further five years, to 2016.

To sum up, since the reactor shut down, we've always sought to communicate what we know. We have based our project plans and our communications surrounding these project plans on evidence, not speculation. We will continue to be fully transparent with Canadians based on what we know today, and we are confident that we can return this reactor to service in the first quarter of 2010.

We truly have an outstanding team of professionals—scientists, engineers, and technologists—who can get this job done. We know the eyes of the country and the world are upon us, and that is why we have the personnel, the supply partners, and the third party independent verification that is appropriate to these circumstances.

• (1520)

I do want to conclude with a brief comment on some of the ongoing debate about the MAPLE reactors and the possibility that they could be a solution for the near-term production of medical isotopes.

Let me reiterate the facts. The MAPLEs were never approved to be put into service. The reactors are in an extended shutdown state. The MAPLEs are not a viable solution for long-term isotope production, and they most certainly are not a solution to the current isotope shortage.

Thank you. We're happy to respond to any questions.

• (1525)

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

We go now to the questions. First up is the official opposition.

Mr. Bains, you have up to seven minutes. Go ahead.

**Hon. Navdeep Bains (Mississauga—Brampton South, Lib.):** Thank you very much, Chair.

I'd like to thank the witnesses for coming out this afternoon. I think your comments early on indicated the seriousness of this issue. It's greatly appreciated that you're here this afternoon.

I want to start off by asking you a set of questions. First of all, prior to the shutdown in 2007, how many times did a shutdown at Chalk River trigger a global isotope crisis?

**Mr. Hugh MacDiarmid:** That's a question I'm not sure I can answer.

Mr. Pilkington.

**Mr. Bill Pilkington (Senior Vice-President and Chief Nuclear Officer, Atomic Energy of Canada Limited):** Actually, I'm not sure I can answer it either.

It has certainly not been in the time that I can recall. Before the NRX reactor was taken out of service, I believe in the early 1990s, there was a second reactor at Chalk River that could back up the

NRU. Since that time, I've not been aware of any isotope shortage of the magnitude that occurred at the end of 2007, or the current.

**Hon. Navdeep Bains:** So the multiple isotope crises that we've seen have happened under Conservative watch. Is that factually correct?

**Mr. Hugh MacDiarmid:** That's a comment I'll let you make. I'd prefer to let you make it.

**Some hon. members:** Oh, oh!

**An hon. member:** You're wise.

**Hon. Navdeep Bains:** Fine.

On June 5, 2008, you appeared before this committee alongside the former natural resources minister. At that time, Minister Lunn stated, and I quote:

The NRU reactor is operating more efficiently and safer today than at any time in history....Canadians can be assured that they will have an adequate supply of isotopes.

At that time, did you provide those reassurances to the minister for him to make that assertion? Again, that was June 5, 2008.

**Mr. Hugh MacDiarmid:** Well, we're stretching my powers of recall, but certainly I could imagine that we would have given the minister assurances that it was our very sincere intention to operate the NRU to the best of our abilities and to ensure that it was a reliable production environment for isotopes.

**Hon. Navdeep Bains:** Okay, because the quote speaks for itself, and it clearly indicates a fair amount of confidence in the ongoing supply of isotopes. That's why I bring this quote to your attention.

In the last 20 months, we've seen three unplanned, extended shutdowns at NRU Chalk River, each time triggering a crisis, as I've talked about before. The latest shutdown began three months ago and is scheduled to continue into the next year, as you indicated in your remarks.

On August 12, just a few days ago, the Minister of Natural Resources and the Minister of Health issued a release stating that they were very disappointed with AECL's announcement on that day and that they had actually instructed you to provide a return to service plan. Can you elaborate on what that plan is? Is it different from what you articulated in your opening remarks? Have you provided any additional information that you can share with us?

**Mr. Hugh MacDiarmid:** It is not in any way different from what I just laid out for you. AECL's governance structure is one that works through a science, technology, and nuclear oversight committee of our board of directors. The board is in turn accountable to the minister.

We did just recently present our repair and return to service plan to our science, technology, and nuclear oversight committee. We gained their authorization to proceed with the repair plan. It very much reflects the timetable that I just gave you.

**Hon. Navdeep Bains:** So the plan you articulated is actually just a timeline, is that correct?

**Mr. Hugh MacDiarmid:** Perhaps I'll let Mr. Pilkington respond. He has direct responsibility for the day-to-day conduct of the project.

**Hon. Navdeep Bains:** Thank you.

**Mr. Bill Pilkington:** We are in fact working to a plan and to a schedule. We are continually updating that schedule as we get new information. The point we're at is that we have enough inspection data that we have been able to make a decision on going forward with repair technology. As a result, that adds definition, I guess, to the plan that we will be executing.

At this point, we do have a much better schedule laid out as to when we can bring the NRU back into service.

**Hon. Navdeep Bains:** You refer to a schedule and to 2010, the first quarter. Is there any specific date you can provide beyond that quarterly date and the year, to give a better indication of that plan and the timeline?

**Mr. Bill Pilkington:** We have a schedule that we've put together, and it still does have some uncertainty around it, and that is why we have given the general range of the first quarter of 2010.

• (1530)

**Hon. Navdeep Bains:** The reason I ask is that Minister Raitt stated yesterday, "We're continuing to press AECL for a quicker return to service", as she was quoted in the newspapers. Given the extent of the repairs necessary at this point, how feasible is that? Is the implication of her assertion that you don't understand the urgency of this, or you might not have the resources or tools, or that she actually has some sort of alternative suggestion she provided to you? In your opening remarks, you indicated the urgency and necessity of this issue and that you have a plan, yet she's continued to press you for a quicker return. Does she have an alternative solution she's provided to you or given you direction on?

**Mr. Hugh MacDiarmid:** There is no alternative solution. My interpretation of the minister's remarks is that they reflect the wishes and hopes of all Canadians and all people involved that we will be able to return this reactor to service as soon as humanly possible. She certainly has given us very clear direction that nothing is to stand in the way of, no other priority is to take precedence over, the return to service of the reactor into isotope production, and also that we are to be deploying our resources, to the extent possible, on a 7/24 basis. And that's been happening.

The range you're seeing from us now is a very real reflection, as Bill said, of the range of uncertainty that surrounds a project of this complexity and this nature at this particular stage in time. We've based our guidance on the evidence that we have. We have a firm timetable that we're managing to, but we have to reflect in some way, shape, or form where things stand. It's our job to be realistic and practical, and a precise deadline today would not be meaningful. We have a target and some contingency built into it, and we feel comfortable, as the CEO and the chief nuclear officer, committing to a timeframe of the first three months of next year.

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

We go now to Madame Brunelle for up to seven minutes.

Go ahead, please.

[Translation]

**Ms. Paule Brunelle:** Good afternoon, gentlemen. Thank you for being here on this beautiful late summer day. You will understand that, as a result of the current emergency, everyone is asking us parliamentarians to take action and shed a little more light on the matter.

Dr. McEwan is a special adviser on medical isotopes to the Minister of Health. He said one thing that surprised me somewhat. He talked about the possibility that the NRU might remain shut down. He isn't a nuclear reactor specialist, but every stage is extremely complex and, since May 14, the scheduled dates in your turn to service plan have changed a number of times. How can you be sure today that the reactor will really be restarted in spring 2010?

[English]

**Mr. Hugh MacDiarmid:** As I said, we base the guidance we make public on the accumulation of the evidence available to us and the expertise we can bring to bear, both internally at AECL and externally. And the guidance we have provided successively over the past few months of this project has always reflected that very real uncertainty that exists at an early stage of a very technically demanding and complex project.

The most recent release we made does in fact reflect a very different tone in our projection, because we didn't just say that it's going to be at least this or that amount of time or by this date, but we put a bracket around it and said it's going to be within that three-month period of the first quarter of next year. That really reflects the business judgment that both Bill and I bring to the task, and also the support and advice of both internal and external experts who have been retained.

So there is always uncertainty, there is always risk; but to date, we feel comfortable making the commitment publicly that AECL is planning to return this reactor to service in the first quarter.

[Translation]

**Ms. Paule Brunelle:** I've had the opportunity to see the explanatory model on your website. You can see there really is some corrosion and that a line has extended. If I remember correctly, there are now seven corrosion points. So I wonder whether the situation gets worse every time you examine the reactor a little further, or whether you have really looked at all those problems and can really assure us that you're beginning the second and third phases, that is to say repairing and restarting the reactor.

• (1535)

[English]

**Mr. Hugh MacDiarmid:** I'll let Mr. Pilkington respond.

**Mr. Bill Pilkington:** As we've progressed our inspection, we have covered more of the circumference of the vessel. Initially we were dealing with one leak, and as we increased our ability to inspect, we found other locations where there was corrosion. We now believe as many as nine areas on the vessel will require repair. They're all relatively small, very similar, and located at a similar height above the base of the vessel. So there is a band around a portion of the base of the vessel where this corrosion is present.

We have now completed the inspection of the full circumference through this band at that elevation, so we feel much more confident that we have the necessary information to specify the repair technology we need to apply and move forward to manufacture the tooling and implement that repair.

With the nine sites, it became apparent that there was little additional schedule time required to put a band of weld built up around the base of the vessel instead of simply repairing individual sites. So by applying a band of weld repair as the basis for our schedule, we essentially found that schedule. If we were to identify some additional sites within this general region, that would not further extend the schedule to repair the NRU.

[Translation]

**Ms. Paule Brunelle:** How much do you estimate this rebuilding, these repairs and this outage will cost? We can consider that there are labour, evaluation, appraisal and other costs. Do you have any idea of the costs, and who will pay the bill?

[English]

**Mr. Hugh MacDiarmid:** Certainly AECL will need to seek funding authorization from the Government of Canada to fully carry out this project. We expect that the government will impose a very serious requirement on us to justify the costs and demonstrate our confidence that the repairs will be carried out successfully.

[Translation]

**Ms. Paule Brunelle:** During your presentation, you told us hoped to extend AECL's certification, that is to say its authorization. You would like that to be until 2016, I believe. Is that optimistic? Could that be possible? Isn't your reactor a little old?

[English]

**Mr. Hugh MacDiarmid:** This is an initiative we have had under way since the decision was made to terminate the MAPLE project, which is now over a year ago. At that time it was clear that in order to fulfill our commitment to produce isotopes for the global marketplace we would have to renew the operating licence of the NRU and the Chalk River facility for the production of isotopes. It was on that basis that we developed an isotope supply reliability program, which is basically the sequenced phase set of activities we will undertake to successfully secure a licence renewal from the CNSC. We have a protocol signed with the CNSC for the conduct of that project, so we're certainly very intent on achieving that licence renewal. We're working very closely with the regulator to ensure that we take all the necessary steps to ensure that it will happen.

**The Chair:** *Merci*, Madame Brunelle.

We'll go now to Mr. Cullen for up to seven minutes.

**Mr. Nathan Cullen:** Welcome back again. I hope we don't keep meeting in these circumstances.

You folks are obviously heavily involved in the medical isotope business. The government, through the Prime Minister, decided some months ago that Canada was getting out of the medical isotope business. The Prime Minister made it sort of a public declaration of policy. I asked the representative of the association of people who work in the industry in which you also work if they had ever been consulted. Did anyone ever ask you?

• (1540)

**Mr. Hugh MacDiarmid:** The guidance I get from the Government of Canada is clear. As it stands right now, I am to continue to produce isotopes from the NRU reactor until I'm instructed otherwise.

**Mr. Nathan Cullen:** Isn't that a bit strange, though, when you see—I don't know if he's your boss—the Prime Minister getting up one day and saying, “We're out of the business. We're not doing these isotope things anymore”, but he wants you folks to keep working as hard as you can to keep the duct tape on this really old reactor whose age we're being reminded of all the time? It seems a very contradictory message.

Does that affect the way you folks go about the repairs? You just put your heads down and do what you're told?

**Mr. Hugh MacDiarmid:** My minister has been very clear as to what her direction is, and that has been for us to return this reactor to service as quickly as we can, and that's what we'll do.

**Mr. Nathan Cullen:** Let me ask you about that. You talked about it earlier. The minister was quite definitive with you—and she has been with me as well—that MAPLE was a no-go. There was no chance; her government was not interested in pursuing the MAPLE project. Has that been her clear and definitive direction to you as well?

**Mr. Hugh MacDiarmid:** We recommended to the government, and the government accepted that recommendation, so in that respect, the decision to terminate the MAPLEs project very much flowed from AECL, and based on our view that the project was not a wise pathway for us to follow going forward.

**Mr. Nathan Cullen:** So it's a little strange, then. I was just reading in the paper today, coming in from Halifax, that the expert panel is looking at the MAPLE as an option now. This expert panel that the government has convened has put MAPLE back on the table—I assume under the government's direction. I'm getting a bit confused.

**Mr. Hugh MacDiarmid:** I wouldn't assume that it's under the government's direction. I don't know, but I believe that the expert panel has been willing to entertain submissions from many different parties, and certainly any one of them is free to put ideas forward. We at AECL are very prepared to have our decision scrutinized, have it reviewed, because we want nothing other than the right answer and the best answer for the global supply chain of medical isotopes.

**Mr. Nathan Cullen:** At the beginning of your testimony, you talked about understanding the effect and the concern within the public of what it means to not have these tests available, these tests for cancer and for heart conditions. I'm sensing you get it about timelines—not just intellectually, but you get it emotionally; you understand how worried people are.

**Mr. Hugh MacDiarmid:** You can imagine that there's nobody at AECL who feels comfortable seeing the coverage of this issue in the media. We all feel very keenly the pressures that exist and the intensity with which we have to tackle our challenge.

**Mr. Nathan Cullen:** Along with that, there are the international obligations that we have. We've created this relationship and confidence with these other buyers, other countries that seek our product, whose confidence—I assume you would agree with me—has been shaken over these last number of months. I'm not sure if any of the folks we have traditionally supplied to are feeling all that thrilled with our performance.

**Mr. Hugh MacDiarmid:** Well, I would suggest that one of the indirect benefits out of the supply disruptions, not just of our reactor but of the Petten reactor and others, is the increased awareness globally of the fragility and the dependency of the supply chain on a small number of reactors. So we certainly can understand that there would naturally be a movement to bring on a more diverse set of supply sources and reduce the dependency that we all have worldwide on the Petten and NRU reactors.

By the way, I think it is important to note that we certainly did our fair share last year as a supplier to that world market by upping our production.

**Mr. Nathan Cullen:** Did that ever strain the reactor, putting that much isotope production out?

**Mr. Bill Pilkington:** No. The first thing we did in responding to the outage of the Petten reactor was to look at how we could modify our production without impacting the reliability of the NRU.

**Mr. Nathan Cullen:** You understand my line of questioning. We suddenly had to replace another downed reactor. We upped our supply. Within months of having done that, our reactor went down with holes in it. The public could be forgiven.

I want to get to the question of your comfort with the timeline as proposed. You're saying the first quarter of 2010—nine months from now, give or take, eight or nine months. When the reactor first went down in May of this year you also issued some timelines and some estimates of when the reactor would come back up, and you were comfortable with those as well.

• (1545)

**Mr. Hugh MacDiarmid:** We estimated, we provided guidance on the minimum outage, and again, that truly was our best. We knew it would not be shorter than  $x$  amount of time.

**Mr. Nathan Cullen:** What was that, if you can remind the committee?

**Mr. Hugh MacDiarmid:** Bill should perhaps respond to that, but I'd like one more shot at it. You go ahead.

**Mr. Bill Pilkington:** I would just point out that I believe our first estimate was of more than three months. That estimate was based on the belief that we would be doing a simple mechanical repair of the reactor vessel at one site. After we did some inspection, we came back and said it would be late in the year, at the earliest, based on having done inspection and predicting that we would likely have to repair as many as five sites.

We are now expecting to have to repair as many as nine sites. We have bounded the total number of sites by moving to this band of weld buildup as the repair method.

**Mr. Nathan Cullen:** Just before your comment—

**The Chair:** Mr. Cullen, Mr. MacDiarmid had indicated he wanted to finish his answer to the question.

**Mr. Nathan Cullen:** I think this will be relevant to his answer, actually.

**The Chair:** Okay, go ahead.

**Mr. Nathan Cullen:** We're operating under the minister's request to return to service. This is a ministerial request. Is it a formal thing? Is it an informal thing? Is it a—

**Mr. Hugh MacDiarmid:** I consider it very formal. I consider it a formal direction.

**Mr. Nathan Cullen:** Right. When was it issued?

**Mr. Hugh MacDiarmid:** Well, it would have been within days of the occurrence of the outage, because as it became evident that the outage would not be a short one, it was very clear to all concerned that this was a serious matter that would attract a lot of attention. So certainly from the very earliest stages the direction has been clear from our minister.

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

We go now to the government side and to Ms. Gallant, for up to seven minutes. Go ahead, please.

**Mrs. Cheryl Gallant (Renfrew—Nipissing—Pembroke, CPC):** Thank you, Mr. Chairman, and through you, thank you to the witnesses.

First of all, I must say how refreshing it is to hear the new-found support of the nuclear industry from the New Democratic Party.

We've heard that even though there may be many reactors or other sources of moly-99, the bottleneck may really be the limited number of places where the radioactive targets can be received and processed to make the medical products. There must also be a challenge to find locations for the handling of the resulting radioactive waste. Can you tell us the role of Chalk River Laboratories, presently and in the foreseeable future, in providing these essential services as part of the supply chain for medical isotopes?

**Mr. Bill Pilkington:** The Chalk River site is licensed to process our own waste and also to accept waste from other producers, so essentially we have the rest of the supply chain. We have processing facilities that are currently available and we have a waste management stream that is currently available. What we lack right now is a supply of the radioactive targets.

**Mrs. Cheryl Gallant:** Okay.

Now, isotopes seem to be very critical and important to the entire world. They also, according to testimony, seem to be financially lucrative. Why aren't there many other reactors or producers throughout the world?

**Mr. Hugh MacDiarmid:** Opinions can differ on this matter, but it's not clear to me that market prices for isotopes have in fact been at a level that would be fully compensatory for AECL. Many factors go into the determination of international market prices; we do not have control over the pricing of our product in that marketplace, so I would take some issue with the notion that isotopes are a highly profitable business for us. We receive a revenue share, but we incur significant costs, and at this point in time this business line is one in which our cash out has substantially exceeded our cash in.

**Mrs. Cheryl Gallant:** Given what you just said, do you see a shift to alternative isotope sources in the future?

• (1550)

**Mr. Hugh MacDiarmid:** I'm not all that well equipped, necessarily, to be a predictor of that, but certainly if there is an evolution to a market price that will attract investment and attract development of alternative methodologies of production, then you could naturally expect that to occur; otherwise, it will need to be through the commitment of public funds, whether here in Canada or in other jurisdictions.

**Mrs. Cheryl Gallant:** There seems to be quite a concern about the length of time that it is taking to repair. I understand the name of the item that has to be repaired is the calandria.

**Mr. Bill Pilkington:** The calandria would be the term used on a commercial CANDU power reactor, so we would refer to it simply as the reactor vessel.

**Mrs. Cheryl Gallant:** Okay. So has this been replaced in the past?

**Mr. Bill Pilkington:** Yes, this is the second reactor vessel. The original one was replaced between 1972 and 1974.

**Mrs. Cheryl Gallant:** And what is the usual lifespan of this item?

**Mr. Bill Pilkington:** The vessel does not have a prescribed life. It's really based on the results of the aging management of the vessel. The first vessel was of a somewhat different aluminum material, alloy, from the current one and had a significantly shorter life. The current vessel has been inspected several times and has been deemed

to be continuing to be fit for service for an extended period into the future.

**Mrs. Cheryl Gallant:** So it was not due at some point for a replacement; it has just been patched since 1972?

**Mr. Bill Pilkington:** Actually, I think there was only repair made in about 1991-92, but other than that, it has been really only inspection.

**Mrs. Cheryl Gallant:** Okay. Can you tell us how this item is going to be repaired? We've heard about welds, we've heard about patches and paints. Explain to us why it's taking so long.

**Mr. Bill Pilkington:** It's all about location. So the drawings that you were handed out are really images taken from 3-D CAD models, and if you look at the first one, it's a model of the complete reactor. And what's important to note is the holes at the top, on the deck of the reactor, which in fact are the access points. These are the 12-millimetre diameter access points, and then anything going into the reactor must go through the tubes that go down to the vessel. And then you have the cutaway, which shows the base of the vessel and shows the actual location of the leak. So the challenge here is that all of the inspection and repair tooling has to be operated and inserted through these small holes in the top and has to carry out automatic operations at the base of the vessel.

On the next slide, which I think is on the back of yours, is more detail of that area. So there is an area in the order of four centimetres in a band around the vessel where we see the corrosion, and so that is the location.

And then finally, the third picture depicts the two repair techniques that we're pursuing. So on the left you have the weld repair technology—and recognize that all of that equipment has to come through this 12-centimetre opening—and then we have to be able to actually do the weld at the base of the vessel, have cameras monitoring that, and then have inspection equipment to inspect it.

Then on the other image is a mechanical repair technology, which would appear relatively simplistic, but again, there's the tooling to implement that from the distance we're carrying out all of the operations.

So it's the location where we need to do the repair, in a high-radiation environment, remote, and accessed only through a very small opening, that makes this a very large technical challenge.

• (1555)

**The Chair:** Thank you, Mrs. Gallant. Your time is up.

We only have a few minutes left with these witnesses. Could we have two minutes to each party, and just one question, pretty much. So it's two minutes, to include the question and the answer.

Go ahead, Mr. Bains, for the official opposition.



**Hon. Navdeep Bains:** Yes, I just wanted a clarification on something, and this is what I wanted to ask last time as well. I know this was mentioned before, but I want further clarification on this here.

On one hand, you have the Prime Minister saying that we're no longer going to be in the isotope business; you have the minister saying that they want to seriously entertain the MAPLE reactor option; and then you've clearly indicated your position here.

Which one should Canadians believe? In a serious matter like this, people are trying to figure out a solution and they're getting mixed signals at a political level and from AECL. So how do people reconcile this? How does one go about saying what makes sense now? That's where I think a lot of the confusion lies.

**Mr. Hugh MacDiarmid:** It's certainly not my job to comment on government policy. I execute the directions I'm given.

The direction I have at this point in time is that we are to bring the isotope production capacity back online as quickly as we can, and we are to proceed with re-licensing or renewing the operating licence for the NRU facility from 2011 to 2016.

**Hon. Navdeep Bains:** I appreciate that, but I asked you a question earlier about the comment that Minister Lunn made about the future viability of isotope supplies, and he made that based on the recommendation you had given. You've made a very clear recommendation on the MAPLE reactor and the MAPLE as a viable option, yet the government tends to have a different viewpoint on it.

**Mr. Hugh MacDiarmid:** The MAPLE as a viable option?

**Hon. Navdeep Bains:** No, you've indicated that the MAPLEs are not a viable option.

**Mr. Hugh MacDiarmid:** Correct.

**Hon. Navdeep Bains:** But the minister said she wants the expert panel to look at it. So isn't that clearly an opposite viewpoint to what you've presented?

**Mr. Hugh MacDiarmid:** I don't view it as opposing. I can imagine that in her position of responsibility she wants to ensure that no stone is left unturned and that an independent expert panel will have the opportunity to review and examine any and all options and any and all decisions that have been made. So I'm quite comfortable that the process will end up with the right decision, whatever that might be.

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

We will go now to the government side, to Mr. Anderson, for up to two minutes.

**Mr. David Anderson (Cypress Hills—Grasslands, CPC):** Thank you, Mr. Chair.

There has been a push by some people, who really don't understand the situation around the MAPLEs, to suggest that they should just be started up, that we should get them up and running and get going. I wonder if you can go over again—because I think it's important—why that's not feasible, why that's not an option, and why you determined that it wasn't a reasonable option last year.

**Mr. Hugh MacDiarmid:** I'm very happy to do that.

First, when the decision was made just over a year ago, that was based upon third party advice and our own internal expertise, applied against a very challenging problem, which was to try to resolve a technical and licensing issue that up to that point in time had defied resolution.

When we looked forward at the pathway and asked, what do we need to spend, how long is it going to take, and what kinds of risks do we have to assume in order to go further and try to bring the MAPLEs to a position where they are able to be licensed, we made the decision that it was not the right way for us to go, it wasn't an appropriate expenditure of taxpayer money, and it was indeed chasing a possibility that had a relatively low probability of success. In our view, that decision and that judgment still holds.

As a result of that, we took steps to bring the reactor into an extended shutdown state, and that's where it resides today. It is, in our view, years away. Even if we decided tomorrow morning to restore the MAPLE reactors to some state whereby they could potentially produce isotopes for medical purposes, it is years away, hundreds of millions of dollars away, and entails very, very high technical risk. We don't believe those are appropriate pathways for us to follow, and there is no scenario we can imagine whereby the MAPLEs could be brought out of their current state and be any solution to the near-term isotope shortage.

**The Chair:** Mr. Anderson, your time is up.

We will go now to the Bloc Québécois, to Madame Brunelle, for up to two minutes.

[*Translation*]

**Ms. Paule Brunelle:** One thing bothers me. When the Chalk River reactor shut down in May of this year, it wasn't the first time that had occurred. You're also telling us you want to extend the useful life of that reactor until 2016. Was the government able to anticipate the shutdown of that reactor when it happened the first time? Is it really worth the trouble to extend the useful life of that reactor? Between now and 2016, will there be another extended outage that will cause a crisis and as a result of which I'll be here, white-haired, asking you the same questions?

● (1600)

[*English*]

**Mr. Hugh MacDiarmid:** Well, if there is another crisis, I may not be here responding to your questions—sorry for that offhand remark.

We believe very, very much that the right decision has been made and the right direction has been taken to have the NRU as the isotope production environment for Canada and Canadians. That is based on all the evidence we have. Between the two of us, we have a lot of confidence that this reactor can serve out its useful life as a reliable production environment for isotopes.

[*Translation*]

**Ms. Paule Brunelle:** It seems to me you have a short-term vision of the matters. Shouldn't you have an action plan for the medium and long terms? We know that the useful life of this reactor is coming to an end. So someone should have thought of that 10 or 20 years ago. Why not take this opportunity now to try? Yes, you can extend its life and repair it, but we have to find other solutions. I don't understand this stubborn wish to capitalize on this reactor?

[*English*]

**Mr. Hugh MacDiarmid:** I believe that the minister's decision to appoint an expert panel is a very wise one, because it will bring to the fore all of the possibilities that can and should be examined. That will hopefully lead to a future direction on isotope production in Canada in both nuclear and non-nuclear ways.

In many respects, our role must be to follow the policy direction of the government as it exists. My interpretation of events is that there is a need for further evaluation and study of what possibilities exist. At the appropriate time, decisions will be made as to how the Government of Canada should give us direction and what AECL should do with respect to continued production.

In the meantime, we know what our job is.

**The Chair:** *Merci*, Madame Brunelle.

We'll go back to Mr. Anderson for up to two minutes.

**Mr. David Anderson:** I want to follow up on the MAPLE issue again. You've had folks come in from around the world—from Brooks, the Idaho National Laboratory, and an Argentinian company—to try to solve this problem, and they were not able to do that. An expert panel is being appointed. What do you perceive that they could bring to the table that these folks haven't already brought?

Second, when did the problems become evident in the MAPLE reactor? I understand it was in 2001, and two people were well aware then that there were significant problems. Is that true?

**Mr. Hugh MacDiarmid:** The emergence of the licensing issues with the MAPLE occurred early in this decade—around 2001 or 2002.

On the expert panel, it's an eminent group of individuals. They will undoubtedly want to ask good questions and undertake whatever kinds of reviews they feel are appropriate to come to a determination. That's a healthy process that will bring many possibilities to the surface.

We expect that the decisions and actions we've taken will be subject to some scrutiny as part of that process. We're prepared to deal with that, because we believe we've made decisions that will stand up to that test.

**The Chair:** Thank you very much, Mr. MacDiarmid and Mr. Pilkington, for coming to give us this information. It has been very helpful to us indeed.

We will change witnesses now, so I'll suspend the meeting for a few minutes.

● (1600)

\_\_\_\_\_ (Pause) \_\_\_\_\_

● (1605)

**The Chair:** We'll resume our meeting now with the next panel. First is Serge Dupont, Deputy Minister (Intergovernmental Affairs), Privy Council Office, and special adviser to the Minister of Natural Resources on nuclear energy policy.

Welcome.

Tom Wallace is director general, electricity resources branch, Natural Resources Canada.

Thank you very much, Mr. Wallace, for being here.

Do either of you gentlemen have opening statements?

[*Translation*]

**Mr. Serge Dupont (Special Advisor to the Minister of Natural Resources on Nuclear Energy Policy, Department of Natural Resources):** Thank you, Mr. Chairman. Last time I was given a little more time than usual. With your permission, I won't do the same thing; I'll try to be brief instead. We sent the committee some notes for a statement from which I am simply going to go over certain points.

First of all, on the basis of what you've heard for a number of weeks and months, we all acknowledge the impact of an extended outage of the NRU on Canadians and Canada's health system. It's a serious problem and the health and safety of Canadians are still the government's top priority.

You have heard from the representatives of Atomic Energy of Canada Limited about their efforts to bring the reactor back into service reliably as quickly as possible. In addition, the president and CEO of Atomic Energy of Canada has already mentioned that the minister has clearly said the safe and reliable return to service of the NRU is AECL's top priority. He also said that the minister was trying to ensure that the corporation made every effort to achieve that objective.

Today I'm going to talk about the efforts being made under the leadership of the minister of Natural Resources to improve the security of supply in the short, medium and long terms.

● (1610)

[*English*]

When I last had the honour of appearing before the committee, I outlined the fragility and complexity of the global supply chain and spoke of Canada's role in mobilizing major producing and consumer countries toward enhanced security of supply.

On January 28 and 29, 2009, at Canada's instigation, an international workshop was convened in Paris under the auspices of the Nuclear Energy Agency. Eighty-five participants from 16 countries participated, including representatives from governments, industry, regulators, and the medical community.

A consensus was reached on the need to improve the coordination of reactor schedules, increase transparency, improve the efficiency of the distribution system, and provide timely notification of available supplies to the medical community. This was on the basis that the security of isotope supply is a global problem requiring a global solution.

Following this workshop, the steering committee of the NEA agreed in April 2009 to establish a high-level group to carry the international agenda forward. It includes representatives of all of the countries that own the five aging reactors producing the bulk of the world's medical isotopes—Canada, the Netherlands, Belgium, France, and South Africa—along with Japan, the United States, and Australia, which is an emerging producer. Canada chairs the high-level group. Australia is vice-chair.

I note that all of these steps were undertaken before the unplanned NRU outage. Our message was simple: collectively, we rely on aging reactors and a fragile supply chain. There is a collective responsibility to bring forward additional sources of supply and manage available supplies responsibly, particularly in periods of shortage.

From our perspective, these efforts and relationships have paid off. Less than two days after AECL announced a prolonged and unplanned outage in May, we convened our global partners by conference call, and the minister addressed the group to encourage a supply response. Contacts have been maintained since then through conference calls and a first face-to-face meeting of the high-level group in Toronto on June 17 and 18.

*[Translation]*

When the Petten reactor of the Netherlands underwent an extended outage, from August 2008 to February 2009, Canada increased its supplies from the NRU. Our international partners therefore did the same. Since May, the Petten reactor has stepped up production by 50% and the South African reactor by 20%. Processing capacity was expanded in Belgium to accommodate larger volumes of irradiation by nuclear reactors. Australia intensified efforts to bring its OPAL reactor on stream. We noticed, when the Petten reactor went down for one month near the end of July, that the Belgium reactor went into production and helped reduce global shortages. The Petten reactor has now been brought successfully back into service, which will be very useful as we head into the fall.

That said, the situation will remain fragile and potentially volatile, and our medical community will have to be disciplined and vigilant at all times to ensure the best possible use of available supplies. We of course hail all the efforts that have been made in that direction.

*[English]*

We're also looking beyond the immediate or short term. We're engaged in discussions with the United States government, the Oak Ridge and Idaho National Laboratories, and the Universities of

McMaster and Missouri on the possibilities of putting in place back-up arrangements to augment supplies when the NRU has to be down for periodic maintenance, as would be the case under a program of life extension.

Three technical meetings, co-chaired by NRCAN and the U.S. Department of Energy, have been held since June to develop options for replacing part of the NRU supply, beginning as early as September 2010. Significant work is needed to complete the requisite analysis and safety cases. We've been impressed to date by the level of commitment shown by the U.S. administration in these efforts, facilitated by positive exchanges initiated by our minister.

I would add that jurisdictions around the world are reviewing options and supply scenarios. The U.S., which is by far the largest global consumer, is determined to develop domestic supply capacity. The Europeans and Asians, likewise, are assessing new and alternative sources of supply. This is a welcome development, because a reliable, resilient global supply chain cannot be overly dependent on any one source, whether Canadian or other. The U.S. and other global partners recognize that the supply of isotope—a radioactive product that cannot be stored and must be distributed in real time, as we discussed last time—must be more diversified and more distributed geographically.

Canada too must review its options and how our needs in the medical system may be met over the medium to long term. To this end, the Minister of Natural Resources appointed the expert panel you have already heard about. I would simply mention the names of the four eminently qualified individuals serving on this panel—Peter Goodhand, Richard Drouin, Dr. Thom Mason, and Dr. Eric Tourcotte—who have agreed to prepare a report for the minister by November 30.

As you have heard, 22 expressions of interest have been received and are being reviewed by the panel. These proposals deserve careful consideration. The decisions to be taken in regard to future supply will shape our marketplace and how we serve our needs for the next 20 years or more. There is a range of factors to consider, including determining carefully the role of the public sector in achieving the necessary security of supply for Canadians and commercial interests in bringing forward supply capacity.

The panel is being supported by a secretariat staffed with officials from Natural Resources Canada and Health Canada.

While some of the proponents have chosen to publicize their proposals, I would note that others have explicitly asked that the submissions remain commercially confidential with the panel. The panel and secretariat have respected these requests.

• (1615)

[*Translation*]

Mr. Chairman, we are making every effort to minimize the impact of the current disruption in the global supply of medical isotopes on Canadians. We have taken measures consistent with our means to improve the collaboration and coordination between international partners and reactor operators. We have worked domestically and internationally to find alternatives to the supply of isotopes.

Thank you for your time. I look forward to any questions the committee may have.

[*English*]

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

We'll now go directly to questions, starting with the official opposition.

For up to seven minutes, Mr. Tonks.

**Mr. Alan Tonks (York South—Weston, Lib.):** Thank you. I'm sure I'll share part of that time with my colleague, Mr. Chairman.

Thank you to the witnesses.

The first question I have—and I'm sure the committee would be interested in the response—is from purely a philosophical and professional perspective. Whose responsibility do you believe it is to produce pharma-medical isotopes for the needs of Canadians?

**Mr. Serge Dupont:** It's a fair question.

I think what we have at the current time is a dependence of the overall global market, including Canadians, on five aging reactors. The last time I was here, I described that there is also in fact some reliance in that process on what we call technetium generators in the United States.

I think one of the first questions the panel focused on, in the first discussion I had with them when I went to brief them on the matter, is what is the proper role of the government here versus what may be the proper commercial interests? The proper role of the government is to see that the needs of Canadians are met. There may be different ways and different technologies and different commercial arrangements whereby this might occur. It is early in the process to establish exactly what this may be. But I would suggest, Mr. Chairman, that it is the role of the government and it is now the role of the panel to advise on how to achieve this goal.

**Mr. Alan Tonks:** I take from that, then, that it would be a responsible position for the department to take in advising the expert panel that the health of Canadians, both medical and economic, is a very high priority and that there is a total absence of bias with respect to the panel review in coming forward with its recommendations. Would that be correct?

• (1620)

**Mr. Serge Dupont:** The terms of reference for the panel have been structured such that the principal focus is to meet the needs of

Canadians in regard to medical imaging and therefore the supply of technetium to Canada, asking them as well to look at different criteria in that regard, one of those criteria being other benefits to Canadians, including the economic benefits that may flow from different ventures.

**Mr. Alan Tonks:** Okay, but expert advice has been given today that there have been shortcomings with respect to the other technologies when there is an interface with a medical prognosis. So there is no single solution, but there is the strategic combination of solutions, one of which is the role that NRU has played in terms of producing medical isotopes, the goal of which was for the MAPLE reactors to produce medical isotopes that were of a generic and universal application.

My concern, and I wonder if it would be your concern, is that if you listen to Mr. MacDiarmid, who was here just previously, there is no absence of bias with respect to Atomic Energy of Canada. They have completely taken off the table, for example, the possibility of reactivating the MAPLE reactors. If there is that kind of disposition, what kind of credibility can the Canadian people have in the strategy that you've also indicated, about the fast-tracking of the McMaster capabilities and its reactor? And I think UBC similarly has a capability. What trust can Canadians have that the expert panel's decisions will be listened to if it should come out and say, "Here are the strategic parts, and it is in the Canadian interest, medical and economic, for these recommendations to be accepted"?

**Mr. Serge Dupont:** First, I would make very clear that the panel will be reporting to the minister, not to AECL. So I think the minister is certainly looking to get their best advice, and I don't think the minister is starting from any presupposition about what may be the best alternative.

That said, in 2008 the government had to make a very hard decision, based on the evidence presented to it at the time about the MAPLEs, and face the situation where there were considerable further costs to be incurred, considerable uncertainty, and timelines that made it no longer attractive to pursue that option. If the panel comes back and suggests that on the basis of evidence presented to it, this is worth another look, I'm sure the minister will be looking at that.

As regards the other technologies, I should make two points of clarification. The minister has not explicitly asked the panel to advise on MAPLEs. The minister has asked the panel to look at the proposals submitted to it, and we expect—and there is, obviously—some proposal related to the MAPLEs. There is, therefore, an expectation that the panel will take that under advisement.

Second, you mentioned other technologies, and in terms of what we heard from the medical authority earlier, I want to make a distinction. I was talking about different technologies to produce technetium, which could be done through accelerators, cyclotrons, or another research reactor, so not the alternatives to technetium for medical purposes.

**Mr. Alan Tonks:** I appreciate that clarification, and I'm sure the committee does.

Finally—and I'm sure the committee would like to have a comfort level—in view of the very professional overview you've given with respect to the role of the panel, the adjudication with backup support from departmental and ministry staff, why would the committee support contracting the evaluation out in the manner that has been entrenched in the proposal call? Why would we support that?

**Mr. Serge Dupont:** You're referring to the RFP that was issued for advice from an outside party.

**Mr. Alan Tonks:** Yes, that's right.

**Mr. Serge Dupont:** We have the benefit of having four eminently qualified individuals. I think it is fair for them to have the benefit of some review, some scanning of these proposals, and some analysis being performed so that they are not simply presented with a stack of 22 proposals: "Here, we know you'll work really hard, and we're looking forward to your advice." This is allowing an entity to come in with professional expertise.

We actually had set out, even in the terms of reference when we first announced the panel, that there would be this kind of support to the panel so that they would be able to look at the different 22 proposals consistently across a set of criteria, with some input provided by an outside party.

• (1625)

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

We now go to the Bloc Québécois.

Madame Brunelle, you have up to seven minutes.

[*Translation*]

**Ms. Paule Brunelle:** Good afternoon, gentlemen. Thank you for being here.

Mr. Dupont, you talked about nuclear medicine physicians, thanked them and hailed their work. They are obviously on the front line and it is no doubt difficult to see waiting lists growing and patients not receiving their treatment.

However, they seem skeptical about you. The representatives of the Association of Nuclear Medicine told us that they are concerned about the successive delays in making repairs to the reactor and about the devastating—and apparently irresolvable—effect that the medical isotope shortage is having on the health of Canadians.

The committee has heard from you on a number of occasions. Since your last visit, what has your department really done to resolve this crisis? Please reassure us.

**Mr. Serge Dupont:** First of all, I would like to emphasize that there is no discrepancy between the physicians' statement and the basic position of the Government of Canada. The government itself is concerned at all levels. There is of course some frustration that there has not been a solution that can be implemented in one day. That's the reality, and it has set in over a number of years. The reactors are of a certain age. I believe the comments on the repairs to the reactor show that this is an extremely technical, highly complex field in which every project will take time and will be very costly.

I've tried to outline in part what we're doing. The idea is first to see what capacity is available internationally and where we can get additional capacity. Some has already come on stream in the

Netherlands and South Africa. Of course, we can't completely replace the production of the Chalk River reactor. We won't be able to do that overnight. It will take a few months or even years more before we have a framework enabling us to completely replace the Chalk River production. You're feeling frustrated, as are the government and the physicians. That's the fact of the matter. There is no solution that we can implement immediately.

**Ms. Paule Brunelle:** I'm particularly concerned by the fact that we are unclear on the matter. You're telling us today that a panel has been responsible for examining the solutions for many months now. There are 22 proposals on the table, but you can't tell us about them. Give us some possible options. What are we to tell people, that the government has been negligent, that the government has been sitting on its hands all summer or that the government has taken the opportunity to do nothing while the media radar screen was not switched on?

We parliamentarians have to answer to our electorate. Personally, in my office, I receive people who are in tears, who can't get the necessary care; it's not true that there are so many alternatives. I must have answers. I want to be able to be confident that the department will intervene and that it is able to do something for patients.

**Mr. Serge Dupont:** Mr. Chairman, I understand that the Canadian public is entitled to expect answers. Everything is being done so that solutions can be introduced as soon as possible. First of all, the first solution is to restart this reactor as soon as possible. No effort has been spared to that end.

Second, we have to mobilize existing international capacity as much as possible. We are able to identify certain increases in capacity by our international partners. We're going to continue working with them so that that continues.

Lastly, you have to consider the medium and long terms. An expert panel is currently working and will be making recommendations. There are various proposals, but I can't give you any details on some of them. Obviously, some are known to the public, whether it be McMaster University, the TRIUMF lab or others. We'll be assessing those proposals as best we can and, of course, we will see that Canadians' needs are best served as soon as possible.

• (1630)

**Ms. Paule Brunelle:** This committee has had discussions with the people from McMaster University and the TRIUMF laboratory. They seem to be able to provide solutions quite quickly. I'm surprised you haven't been able to intervene sooner and tell us that matters have evolved. We have to wait until November for the panel's report to be tabled. I admit I'm very disappointed. The matter will be in the government's hands at that time. How many months will it take? We're going to meet again in two years and we'll be asking you the same questions.

**Mr. Serge Dupont:** There is clearly a problem at this time and any process that must take a certain amount of time will be a very legitimate cause of impatience.

That said, whether we're talking about the TRIUMF lab, MAPLE reactors, McMaster University or other proposals that are on the table, all these options would require considerable amounts of money from the government, a significant commitment and the mobilization of major resources. Choices have to be made. Those choices, as I mentioned in my introductory remarks, will have an impact for the next 20, 30 and 40 years. It is well understood that there are very serious short-term imperatives. At the same time, the decision will have a significant impact. A simultaneous assessment must be conducted of all those proposals on the same basis. It nevertheless takes time to do that job properly and professionally, and we're doing it as quickly as possible.

**Ms. Paule Brunelle:** Do I have any more time, Mr. Chairman?  
[English]

**The Chair:** Actually, your time is up. You had about 10 seconds, but I've managed to use that for you—

[Translation]

**Ms. Paule Brunelle:** I shouldn't have asked the question.  
[English]

**The Chair:** —so we'll go now to Mr. Julian, who is filling in for the New Democrats.

Go ahead, please, Mr. Julian. It's great to see you here.

[Translation]

**M. Peter Julian (Burnaby—New Westminster, NPD):** Thank you very much, Mr. Chairman.

Thank you for being here today, Mr. Dupont.

A little earlier, you said, in response to questions from Ms. Brunelle, that no effort would be spared to restart the reactor. Could you tell the committee how much money the department has invested to ensure it is restarted as soon as possible?

**Mr. Serge Dupont:** The costs will quite obviously be determined by Atomic Energy of Canada in the course of this project. Atomic Energy of Canada is a Crown corporation that the government has funded and continues to fund. The government of course will bear its responsibility for the funding of those operations in the context of its overall financial relationship with Atomic Energy of Canada.

**Mr. Peter Julian:** Does that mean you haven't yet received a request from Atomic Energy of Canada for funding to restart the reactor as soon as possible?

**Mr. Serge Dupont:** There hasn't yet been a formal request, but very clear instructions have been given for the task to be completed. We know perfectly well that there will be costs. We haven't yet been sent a formal request, but we're expecting it. To date, the Government of Canada has discharged its responsibility with respect to the financial needs of Atomic Energy of Canada and will continue to do so.

**Mr. Peter Julian:** You haven't yet received a request, but if a request is made, will the department consider helping AECL?

**Mr. Serge Dupont:** If the request is made, we'll follow the usual procedure in the context of our relations with Atomic Energy of Canada, which is a Crown corporation.

**Mr. Peter Julian:** Thank you.

[English]

I have a follow-up question, then, because this is not a small issue, as you can imagine; this is a crisis, particularly for those who are having to wait for a diagnosis and wait for treatment. When you have cancer, every day has profound implications for the health of the individual and for the family as well.

I'm curious. If Atomic Energy of Canada Limited has not yet provided any figures for the ministry to provide support so we can get the reactor up and running, I'm interested in knowing what the costs of servicing and maintenance were for the NRU in the past year and what resources were available for that reactor five years ago and 10 years ago. Do you have those figures available?

• (1635)

**Mr. Serge Dupont:** I would have them, and I would be happy to provide the committee with a full chapter and verse on the funding that has been provided to Atomic Energy of Canada, including to Chalk River Laboratories, in the past.

Those amounts, at the level of the Government of Canada, were not disaggregated to the level of maintenance for the NRU. That would have been within the financial accounting of Atomic Energy of Canada.

**Mr. Peter Julian:** Yes, but those figures are available to you. I've seen them.

**Mr. Serge Dupont:** I'm sure they would be, from Atomic Energy of Canada.

**Mr. Peter Julian:** As part of the reporting structure.

**Mr. Serge Dupont:** Right, I suspect they would be, but the reporting structure would be about running the Chalk River Laboratories, which is a broader operation than simply the NRU. There are all kinds of other facilities there, and the government would, on an annual basis, have provided an appropriation—and has provided an appropriation—to Atomic Energy of Canada to run Chalk River Laboratories, and in various cases it has also received supplementary moneys to provide for the update and the upkeep of the facilities.

**Mr. Peter Julian:** But you have those figures available. Can you make them available—

**Mr. Serge Dupont:** We, as the Government of Canada, can make available the numbers for Chalk River. But the further disaggregation would have to come forward from AECL.

**Mr. Peter Julian:** Let's move on to the costs to the health care system and to provincial governments. We've had estimates of \$10 million from Quebec, much more than that from Ontario and from other provinces impacted as well. These are all additional costs that weigh on the health care system because of the cost of supplying isotopes.

Within the ministry, is there a department or section that is tracking those additional health care costs?

**Mr. Serge Dupont:** Mr. Chair, that would be the principal responsibility of Health Canada. Health Canada has been conducting the interface here with the provincial ministries of health, with the health community. We at NRCan have been focused on the supply side of the equation. We obviously talk to Health Canada and we have those kinds of discussions, and we appreciate that the fragile situation globally is entailing higher costs, but you would need to address the question to Health Canada in terms of jurisdiction by jurisdiction, or actual higher costs.

It is also not a trivial matter estimating that, because for example, even prior to the NRU shutdown, there were some price increases announced by some of the suppliers of technetium-99. So there were already some market developments prior to the shutdown of the NRU, and one would have to disaggregate what is truly the cause of the NRU shutdown versus what may be other market factors in play.

**Mr. Peter Julian:** Mr. Dupont, are you saying then that any tracking that's taking place of the additional costs to the health care system of not having the production online is taking place separately from the ministry, and the ministry's unaware of those costs?

**Mr. Serge Dupont:** No, I'm not saying we're unaware of those costs. We're aware of the costs generally. We're aware there are higher costs. We've been working closely with Health Canada on this, and Health Canada is working with the provincial ministries.

**Mr. Peter Julian:** But wouldn't they be making those figures available to the ministry? I don't understand this. You've got Health Canada doing one thing and the Minister of Natural Resources doing another.

**Mr. Serge Dupont:** Our principal focus is to try to bring forth the best kind of supply situation to the market. Whether the additional costs are  $x$  or  $y$ , to us the job is the same.

Health Canada has the relationships with the provinces. It is within the provincial domain to assume the costs in the health care system. Health Canada has those relationships, and to the extent that there has been some communication on the costs to the provinces, then Health Canada may be better able to answer the question than I am on the basis of my assessment of the supply situation in the marketplace.

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

We go now to Mr. Shory for up to seven minutes. Go ahead, please.

**Mr. Devinder Shory (Calgary Northeast, CPC):** Thank you, Mr. Chair, and thank you, witnesses, for coming out this afternoon.

I'll be sharing my time with Mr. Anderson.

I have one quick question. Before that, I'm of the view that, if not all, most of us agree to two things. One is that Canada has been the world leader in isotope supplies, and the second is that the shortage of isotopes is a serious concern to all of us.

Coming back to my question, while our government explores the options, I have noticed one thing: that there are some concerns about the government examining the options of the private sector participating in the commercial operation of AECL. My question is, if the commercial operation of AECL is participated in by the private sector, regulated and monitored by CNSC, as it is today,

would it be a compromise of the safety, security, and well-being of Canadians in any manner whatsoever?

• (1640)

**Mr. Serge Dupont:** Clearly, the short and long answer is no. If one looks, for example, at a situation in the power sector in Ontario right now, there is a private sector firm called Bruce Power that operates nuclear reactors in Ontario, under the regulation of the CNSC. It does so with the same safety standards as OPG, and Hydro-Québec and NB Power. So the short and long answer is no.

**Mr. Devinder Shory:** To reconfirm quickly, these days the government is looking for a long-term solution, and we're exploring the viability of producing isotopes with new reactors, so it does not matter who runs that business.

**Mr. Serge Dupont:** I'll be brief in my remark because I may not have fully captured your question.

I think that what was announced on May 28 by the Minister of Natural Resources with regard to restructuring of Atomic Energy of Canada was about the structure, the ownership structure that will best utilize and mobilize the talent that is here in Canada, the expertise, so that we may play as we may play in the global marketplace, and there is a sense that the current structure is not the one that optimizes that outcome.

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

Mr. Jean, you have one question, I understand.

**Mr. Brian Jean:** I have a very short series of questions about the cost estimate, taking over from Mr. Julian. Just from my notes, it seems that there was a 40% reduction in annual appropriation for AECL during 1995 by the Liberal government. Are you familiar with those figures?

**Mr. Serge Dupont:** Yes, we have the full historical tracking of the—

**Mr. Brian Jean:** So that's accurate. There was a 40% reduction by the Liberal government in 1995.

**Mr. Tom Wallace (Director General, Electricity Resources Branch, Department of Natural Resources):** There was a significant reduction in conjunction with program review in 1995. I'd have to go back to the figures.

**Mr. Brian Jean:** In fact, isn't it true that from 1993 to 2006, under the Liberal government there was approximately \$161 million, on average, spent per year for that time period, and since 2006—and a Conservative government—that number has increased to \$425 million per year—\$1.7 billion over four years? Is that accurate?

**Mr. Serge Dupont:** I can't do the math quite that fast, but the numbers look to be in the ballpark. I could certainly provide the committee with the full historicals, if that would be helpful, Mr. Chair.

**Mr. Brian Jean:** For 2009-10, in fact, \$580 million was allocated this year to AECL and Chalk River Laboratories.

**Mr. Serge Dupont:** That's correct, if that is inclusive of the amounts being appropriated through Natural Resources Canada for the long-term waste program.

**Mr. Brian Jean:** So there has been a significant increase in the funding under this government.

**Mr. Serge Dupont:** There has been.

**Mr. Brian Jean:** Thank you.

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

We go now to Mr. Anderson. You have about two and a half minutes.

**Mr. David Anderson:** Thank you, Mr. Chair.

I actually want to follow up on a question. I think Mr. Allen started it, and I think Mr. Tonks touched on it as well, and that's talking about the alternatives. Do you have any information on what percentage of treatments are now being done by alternatives? More importantly—I think Mr. Allen asked this earlier—do you have any idea if we're going to...?

Carolyn, do you want to interrupt or not?

**The Chair:** Could we have order, please.

Mr. Anderson, go ahead, hopefully uninterrupted.

**Mr. David Anderson:** Okay. I had another question.

Do you think we're going to be moving into a time when there's diversification, or once the NRU is back up and some of the other reactors are running, are we going to go back to an almost total reliance on isotopes? Do you have any thoughts on that?

**Mr. Serge Dupont:** The individuals better qualified to answer those questions would be, obviously, in the medical community. What I can tell you, on the basis on the information provided to us by Health Canada, is that they basically estimate that a significant portion of procedures can be replaced by other substances such as thallium and fluoride, as we heard from Dr. McEwan.

That said, there is a portion, estimated to be in a range of 50%, where there is not necessarily at this time an alternative available to technetium. So that is why it is important to continue to have a minimum supply and a healthy supply of technetium. That is why it's important to continue the international efforts to bring it, in the absence of the NRU.

●(1645)

**Mr. David Anderson:** I want to shift to a completely different subject, one that I think should be important to this committee, and it's that despite some of the announcements made recently about new builds being postponed, nuclear power is obviously still a part of our energy mix, and Canadians want it to be that way. These new builds will require some sense of stability.

I want you to talk a little about what Bill C-20—which has been sent to the committee—will do in terms of providing that stability, because I think that's something the committee should be moving forward on if it really wants to deal seriously with the nuclear issue in Canada.

**Mr. Serge Dupont:** Bill C-20 is about updating our nuclear liability regime in Canada. Currently, operators of nuclear facilities have a maximum liability, in the event of a disruption or an accident of any kind, of up to \$75 million. That is outside of the realm of the global standard. The limit will be raised to \$650 million, which is also roughly equivalent to the amount that may reasonably be purchased in the market by way of insurance. So it provides an environment whereby we both hold entities to account and, at the

same time, provide that we may build a viable and vibrant nuclear industry in Canada.

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

We will now go to a second round. If there is anyone who would like to ask questions, we could have about three minutes from each party. We have about 12 minutes left in this round.

Starting with the official opposition, we have Mr. Tonks.

**Mr. Alan Tonks:** Mr. Chairman, I want to follow up on the answer given with respect to the panel committee and the recommendations that would come forward and the role this contracted firm or individual is going to play.

In a critical situation, does the department accept and is the minister prepared to accept that the ultimate decision will be made not by the panel but by some individual or firm contracted to give an opinion? Is that the position the department is taking?

**Mr. Serge Dupont:** Not at all, sir. I would suggest that if the firm that is hired purported to provide definitive recommendations in any kind of way, it would have a very wrong understanding of its role. The role of the firm will be to support the panel, to provide it the best possible cross-sectoral analysis of the information provided in the submissions and to bring added professional capacity to the panel so that they may look at the 22 submissions in a concerted and analytically robust fashion, bringing forth their own very significant expertise. I think you will find that the individuals who serve on the panel are doing so with independence of mind, with integrity and credibility that are extremely strong; and they will be making the recommendations to the minister.

**Mr. Alan Tonks:** Thank you, Mr. Chairman.

**The Chair:** There is a minute and a half left.

Mr. Regan.

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

Mr. Chairman, through you to the witness, can you confirm that there were no shutdowns at the Chalk River reactor that caused a global isotope shortage prior to 2007?

**An hon. member:** Good question.

**Mr. Serge Dupont:** I heard the answer provided to you by AECL. I'm not sure I could confirm that. It is my understanding, Mr. Chair, but I'm not sure I could confirm it with zero element of doubt. I'm certainly prepared to go back and look at the history.

I don't know, Tom, whether you could respond.

●(1650)

**Mr. Tom Wallace:** No, but I think the answer given was that the previous major shutdown was in the early seventies, and there was a backup reactor, the NRX, available at that time. So it didn't create the global shortages we've seen recently with the shutdown of the NRU—or, actually, with the shutdown of the Petten reactor last year. Notwithstanding the efforts of the NRU to ramp up production, there was still a significant impact on the global marketplace.



But prior to 2007, which I think is what you referred to, I'm not aware of any incidents of the kind we've experienced in the last few years. There have been periodic shutdowns of other reactors in the world over the last five years, not just in Canada, which have led to a tight supply situation on occasion.

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

We now go to Ms. Gallant for up to three minutes.

**Mrs. Cheryl Gallant:** Thank you, Mr. Chairman.

I think we have to recognize that the government that was responsible for the 10 years prior to the shutdown bears some responsibility here too.

It seems that your department is working towards a future where security of Canada's supply of medical isotopes is built on a more effective international coordination of isotope-producing reactors. I'm going to ask you a series of questions, so please time your answers accordingly.

Is this the most desirable scenario, as opposed to a stand-alone, Canada-only system for a secure supply? Does the department foresee Canada being a significant contributor to this international network of isotope-producing nations in the long term? Will Canada's contribution to a network of reactor sources be a reactor that is fully integrated with other countries? It seems that we're pausing to consider the merits of many other approaches, while getting started on a replacement for the NRU reactor is delayed for another one or two years. Is this period of discussion really worth the risk of any further delay in replacing the NRU?

**Mr. Serge Dupont:** Again, in terms of replacement of the NRU, if we're talking about building a new research reactor, in rough numbers, that's \$1 billion, and it is an investment for the next 50 to 60 years. That would be deserving of some time to make sure that you get it right. There are other supply alternatives when it comes to isotopes, but as regards a new research reactor, that is an important consideration.

Is it necessarily better than a self-standing Canadian kind of solution? We think so. The reason is that, whatever solution you will have, to have the world dependent on one supply chain when there cannot be inventory of any kind held for any reasonable period of time is not healthy. There has to be more distributed supply.

It is also somewhat uncharacteristic for the U.S., for example, to be the largest consumer in the world, have no indigenous production capability, and rely fully on its international partners. It is perfectly normal, and I think salutary, for the U.S. to look at its own production options.

Should Canada be a significant contributor to the world market in the long term? We certainly have skills, we certainly have capacities, and we have a history. What we have not had to date is a reasonable business model. Frankly, this has not been an attractive business for Atomic Energy of Canada. It may have been for some of the other parties in the supply chain. As I mentioned earlier, the real public policy imperative, number one, is to ensure that the needs of the health care system are met. If, as well, there could be commercial opportunities realized through the export of that capacity, the production in Canada and export, that's great. But the judgment is

still out on that, and I think that's what we hope to hear as well from the panel.

**The Chair:** Thank you, Mrs. Gallant.

Madam Brunelle, go ahead with questions, for up to three minutes.

[*Translation*]

**Ms. Paule Brunelle:** Further to the Prime Minister's statement that he does not want to continue isotope production, could you tell us where the government's thinking currently stands? Will the government continue to produce isotopes?

**Mr. Serge Dupont:** First, the Prime Minister's statement was clear; that takes nothing away from the efforts underway to restart the reactor and to extend its useful life.

Second, the model used to date is not sustainable. It isn't sustainable from the standpoint of health or for Canadian taxpayers. Colossal amounts would have to be invested for Canada alone to continue to supply the global market with isotopes, unless the proposal is commercially viable. It is reasonable to use public funds to meet the needs of Canadians, but not to meet foreign needs.

So the economic model has to be reviewed. I think that's what's underlying the Prime Minister's remarks. The current model isn't working and it has to be changed. That said, in the meantime, the government will shoulder its responsibility and ensure that the market is served.

• (1655)

**Ms. Paule Brunelle:** In the meantime, we have to continue meeting the needs of Canadians at least. As a result of the prolonged shutdown of the NRU, have you coordinated the outages of the other reactors in the world? Some must unfortunately shut down. Has the government put a short- or medium-term action plan in place? For the long term, it's considered that these 22 proposals may perhaps be analyzed. Could you give me a little information on that matter?

**Mr. Serge Dupont:** In the short term, there will be other consultations with other countries, in particular to look at reactor production schedules for 2010. The minister, our colleagues from Atomic Energy of Canada and I have been in close contact with our international partners, the Belgians, the French, the Irish, and we will continue to do so. In September, there will be a meeting in Belgium, where we will study the 2010 calendar and try to see, based on potential risks, the best possible periods of operation for the reactors. There are constraints, and we won't necessarily be able to have ideal scenarios in all cases, but I think there is a genuine awareness among all partners that everyone has a role to play to improve the situation to the best of their ability.

**Ms. Paule Brunelle:** You talked about costs. I'm sure your analysis was painstaking, but perhaps it isn't final. I would like you to be able to take Canadian expertise into account. I sat on the Standing Committee on Industry, Science and Technology, and I was really very surprised when they wanted to sell MDS Nordion, which built the Canadarm. It seems we in Canada tend to do that when we have expertise. It no doubt becomes quite costly and sometimes a little difficult to support, so we abandon it. However, you have to think of the entire scientific community. We are proud to be a leader in certain fields, and you definitely have to assess that.

**Mr. Serge Dupont:** With respect to Canada's nuclear capacity, I would simply say that your comments are somewhat consistent with those our minister made when she announced the Atomic Energy of Canada restructuring proposals on May 28 to better mobilize our resources and ensure that Canada succeeds in this field, which is growing around the world.

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

[English]

Finally, in terms of this panel, we will go to Mr. Allen. You have up to three minutes, sir.

**Mr. Mike Allen:** Thank you, Chair.

Thank you, witnesses, for being here.

In your remarks, Mr. Dupont, you talk about your medium-term actions and being engaged in discussions with the United States government, Oak Ridge, and McMaster with a view to replacing part of NRU's supply beginning as early as September 2010. Some of the testimony that we heard previously from McMaster in relation to the safety cases and the analysis that would have to be done made it sound to me that the timeline, if they were selected, would be a little bit longer than that. What do you see as the most logical types of solutions that could be implemented for part of NRU's capacity as early as September 2010?

As well, do you look at the medium term as being, realistically, what you can do within the next two to three years? Obviously, as you've said, we have to change the whole strategy, and that probably involves a much longer timeframe.

**Mr. Serge Dupont:** You're correct about the medium term. Let's say it's roughly 18 months to three years, essentially operating with the same type of paradigm that we are now. Any short-term solution in a North American context—and we met with the U.S. Department of Energy, with their nuclear regulator, with the CNSC, with the chief laboratories in the U.S. and Canada—is essentially irradiating the same kind of material that goes into the NRU in another reactor and then shipping the irradiated material to Chalk River for processing, essentially under the same process as is done with the NRU.

That is a complex task. We're talking about the transportation of irradiated and highly radioactive material across borders, in some cases, and looking at the capacities of different reactors to accommodate these targets, given their physical characteristics. We've pursued work with the Oak Ridge laboratory, which seems to have a reactor that could accommodate that for portions of time, the Missouri University reactor, and McMaster. McMaster takes a bit more time than the others to get onstream.

We are pursuing that, and the U.S. administration is equally committed to trying to find solutions, but in the best case we're into September 2010 to replace part of the production of the NRU.

• (1700)

**The Chair:** Mr. Allen, you have 30 seconds.

**Mr. Mike Allen:** Thank you.

With Petten back on line and Australia looking to come at the end of the year, what does it look like if that all happens, in terms of replacing what we have now and the situation we have now?

**Mr. Serge Dupont:** We do not expect that, absent the NRU, one gets back to 100% supply when the NRU is up. The situation has fluctuated, for example, in the month of June and July, with Canada getting in the range of 70% of normal supplies or sometimes higher, sometimes 80%, sometimes close to 100%, and sometimes lower, sometimes closer to 50%. The situation will continue to evolve.

We are not in a position to provide definitive forecasts over an extended period of time, and I'll come back to the shorter time forecasts, because a lot depends on what flows back to Canada as supply from the other reactors in South Africa and in Europe.

On the shorter timeframe, Health Canada deals with the two suppliers of technetium generators in the U.S., Lantheus and Covidien. There, with some weeks' notice, we get a fairly accurate picture of what kind of supply to expect.

So I can't really give you a good picture, but we should be in a position where you're not at 100% but you're higher than 50%. It's going to fluctuate over that period of time, depending on a range of considerations, including commercial relations.

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

On a point of order, Mr. Regan.

**Hon. Geoff Regan:** Mr. Chairman, I would like to seek unanimous consent for the committee to meet again no later than next Friday to hear from Dr. Urbain, Dr. Driedger, Dr. O'Brien, and Dr. Lamoureux on the topic before us today and on the impacts that they are seeing on front-line doctors across the country.

**The Chair:** You've heard the proposal.

Mr. Anderson.

**Mr. David Anderson:** That's not a point of order, Mr. Chair.

First of all, I'd like to make the point that the opposition couldn't even get their witnesses organized before they called this meeting. That's one of the things that have ticked me off about this whole thing, and particularly their attitude today.

I'm glad Mr. Regan brought this up. I don't think they've treated this meeting seriously at all, and evidence of that would be the fact that they released their news release earlier today before the meeting was even half over. On Monday morning we heard from the opposition that they wanted to have a meeting. We're required to have it within five days. That basically gave us three days to set it up—Tuesday, Wednesday, Thursday—so we could have it today. We did that. The clerk worked very hard, worked overtime to try to put this together. We set up a three-and-a-half-hour meeting today. It's hardly a short meeting, as Ms. Bennett called it. We've been here.

There is concern over witnesses, apparently. We have used the opposition's witness list. That's what we used to set this up. We brought as many new witnesses into the hearing as we possibly could; it was set up that way. There was apparently some concern over five witnesses, and it gets awfully ridiculous, Mr. Chair, because three of those five witnesses have already appeared at either this committee or at the health committee. One person—and they don't even know this themselves, because it's in their news release—declined. This is their witness who declined. They don't even have that much knowledge of what went on this week to know that.

I think that is probably a pretty good sign of why this meeting was held. It wasn't to find out about isotopes; it was to set up some sort of political charade, which we've seen this afternoon.

Mr. Chair, we're having a health minister here even though this is the natural resources committee. I think we've gone the extra mile for these folks. Clearly, the opposition has been poorly organized right from the beginning, and that's evident by the fact that the witnesses were not even called prior to their deciding that they had a witness list and submitting it to us. A good number of those witnesses were not available.

So between that and the Liberals' having released their news release earlier today, I think it shows what they really intended to do with this today, which is, as Mr. Cullen said earlier, to make it into a spectacle, and they've been able to do that. We probably are not going to get a lot of this testimony out into the public view, because these folks are more intent on trying to make this into, as Mr. Cullen called it, a spectacle rather than dealing seriously with this issue.

So we don't need to meet again, and we don't need to meet again in the near future, and we're going to happily decline Mr. Regan's offer.

• (1705)

**The Chair:** There may be some further discussion on this, but I would like to thank the witnesses very much for coming this afternoon.

Mr. Dupont and Mr. Wallace, you may leave the table, if you like, so that you don't have to take part in this discussion.

Mr. Regan has asked for unanimous consent. Before I go to that, I'd like to say that there seems to be some misunderstanding about who was and who wasn't invited to this meeting. As chair, I've been in discussion with the clerk. He has pointed out to me that there was a press release put out by the Canadian Association of Nuclear Medicine this afternoon. One of the people who signed off on that was Mr. O'Brien, complaining that he wasn't allowed to come to this committee. In fact, he was invited and he declined.

So I don't know what's.... There are, I guess, some very strange things happening in terms of what's being said and what actually happened.

Mr. Regan, you have a right to come and ask for unanimous consent.

I will ask, is there unanimous consent for the proposal that Mr. Regan has put forth?

**Some hon. members:** No.

**The Chair:** No, there is not, Mr. Regan.

We will now suspend this meeting. We have one more witness this afternoon, and that is the Ontario health minister. He has chosen to appear not in person, not by video conference, but by telephone only.

We'll allow a little time for set-up, about two or three minutes, and then we'll go to our last witness.

• (1705)

\_\_\_\_\_ (Pause) \_\_\_\_\_

• (1710)

**The Chair:** Good afternoon again, everyone. We have our last witness now by telephone, and it's the Honourable David Caplan, the Ontario Minister of Health.

Welcome, Mr. Caplan. Are you on the phone?

**Hon. David Caplan (Minister of Health and Long-Term Care, Government of Ontario):** Mr. Chair, yes, I am here. Thank you for inviting me to be here in front of the committee.

**The Chair:** Thank you. Do you have an opening statement to make, Mr. Caplan?

**Hon. David Caplan:** Yes, I do, sir.

Good afternoon, Mr. Chair and members of the committee. I want to start by thanking you for inviting me to appear before the committee. I'm glad to be able to bring Ontario's voice to the table, and I'm here because I am concerned. Our province has relied upon the National Research Universal reactor at Chalk River for 95% of our supply of medical isotopes, but over the past few years, we have become increasingly anxious about the sustainability of the supply. As I believe you all know, it can be disrupted suddenly and with little warning, and because of the just-in-time way that isotopes are produced and delivered, health care providers feel the effects of critical disruption almost immediately and, of course, the effect on health care patients.

As you can imagine, the shutdown of the Chalk River nuclear reactor on May 15 has had significant implications for Ontario patients and Ontario health care providers. Since the week of July 26, supply has been cut in half, and now even as low as 40%. As a province, we have been challenged. That said, I want to assure the members of this committee that Ontario is doing everything it can to respond to this disruption.

We are taking action to ensure that we can continue providing patients with the high-quality scans that they depend upon. For example, in June of this year, we provided \$1.4 million to fund the production of an alternative isotope called <sup>18</sup>F sodium fluoride. Using PET technology, this alternative allows Ontario to provide 2,000 patients with needed bone scans. It's an innovative solution that is ensuring that Ontarians have access to important diagnostic procedures during this challenging time.

We are also providing guidance to the nuclear medicine community to make sure health providers are maximizing available isotopes. By modifying scanning techniques, prioritizing patients, and using alternative diagnostic tools, I am very proud to say that we have been able to minimize the effects of the disruption. We have done that by being responsive and proactive and by anticipating the challenges to come.

Ontario has one of the most comprehensive medical isotope disruption plans of any of Canada's provinces. It is a plan developed based upon the advice of the Ontario Isotope Working Group. The working group is made up of key stakeholders and physician leaders, including the Ontario Association of Nuclear Medicine, Cancer Care Ontario, and the Cardiac Care Network.

Our plan establishes three levels of response, with tier one representing a minor reduction in supply and tier three representing a critical disruption. Ontario is currently operating at a tier two response level. There has been a significant reduction in isotope supply, but our providers have been able to continue managing the disruption locally and we have been offering guidance to our health care professionals.

Tier two triggers the partial activation of the ministry's emergency operations centre. The operations centre monitors isotope supply with the federal government and ensures that all of our health care providers have the tools and information they need to be able to respond.

I want to stress the importance of coordination and collaboration with our federal government colleagues, because Ontario, like all provinces, is relying upon advice, guidance, and information from the federal government as we develop our own response plans, and I want to assure this committee that we are in regular communication with Health Canada officials, because we depend upon them to keep us up to date on the status of the NRU and to share best practices and contingency planning. These, however, are short-term measures.

I am present here today because I'd like to seek clarification about the federal government's plans. By sharing Ontario's story, I hope to foster a federal understanding of the difficult situation I'm sure many provinces now face.

Ontario is operating under the assumption that the Chalk River nuclear reactor will be repaired and that it will continue to produce medical isotopes until a suitable and affordable alternative can be arranged. It's disappointing that Chalk River will remain closed, we are told now, until the spring of 2010.

● (1715)

I would like the government's assurance that it is committed to repairing the NRU. To help us plan, I would ask for regular updates from the government on the progress of the repair, as well as

clarification about when we might again expect the nuclear reactor to resume producing isotopes.

Also, given that we are now reliant on international isotope suppliers, I would ask for regular updates on outages at other international reactors.

Finally, our front-line health care partners have informed us of higher-than-normal costs for medical isotopes. Clearly the federal government should compensate Ontario health providers for these additional costs that they are currently facing as a result of the shortage.

I want to finish my formal remarks by emphasizing my willingness to work with health care partners and all levels of government to ensure that we can find solutions to this problem. Chalk River is a valuable national resource, providing a critical diagnostic tool to all Canadians who need it. It is important that the federal government show leadership and develop a comprehensive, clear, and coordinated plan. Our health care providers, indeed all Canadians, deserve and depend on access to a stable and affordable supply of radioisotopes.

I want to reiterate my thanks to this committee for offering me this opportunity to be able to present, and I eagerly await any questions or comments that committee members might have.

Thank you very much.

● (1720)

**The Chair:** Thank you, Minister.

Before we get started with questions, I would remind everyone that this is the natural resources committee and not the health committee. If the questions stray into an area that is more reasonably dealt with by the health committee, I will suggest that you invite these witnesses, and this particular witness, to the health committee, if you'd like to do that. But let's stick to the issue at hand. Let's stick to the instructions in the letters written by opposition members and start the questioning.

We will go to the first questioner, for up to five minutes.

Ms. Bennett, go ahead, please.

**Hon. Carolyn Bennett (St. Paul's, Lib.):** Thank you very much.

I'm afraid that the patients of Canada don't see the way the government can operate in these sorts of silos, as you've described. We have a health minister before us, and I believe we should, with the will of the committee members, be able to ask questions about the well-being of Canadians and how they will get the tests they need with the isotope crisis as it is.

So I will start with a question. It has a dollar sign in front of it instead of a stethoscope, if that's what you'd prefer.

Minister, last week the *Toronto Star* reported that isotope costs were increasing from \$5,000 to \$30,000 and this is just beginning to appear on the clinics' monthly isotope invoices. How are Ontario hospitals and clinics handling this increased cost of medical isotopes?

**Hon. David Caplan:** Thank you very much for the question.

Our estimate so far is that direct additional costs to hospitals and clinics are in the order of \$1.7 million. Additionally, we have invested in an alternative form of supply, approximately \$1.4 million toward the sodium fluoride isotope. The estimate we have is that if things continue under the current regime, and that anticipates that there will not be a reduction in international supply, by the time Chalk River comes back we could well see a quadrupling of those costs.

**Hon. Carolyn Bennett:** Minister, are these the costs that you're asking the federal government to reimburse you for?

**Hon. David Caplan:** I have written to federal Minister Aglukkaq and to Minister Raitt. It is my contention that this problem has been created by the federal government and that the federal government should fix it. Absolutely, there should be compensation.

I want to stress that compensation is not for the province. It is for hospitals and diagnostic facilities that are unfairly strapped, and ultimately it would be patients who would suffer because of procedures that would not be funded as a result of funding shortfalls.

**Hon. Carolyn Bennett:** Minister, it seems that there has also been some reporting that hospitals might cut back on procedures in order to not run a deficit. Is that a concern of yours?

**Hon. David Caplan:** That is a concern of mine. We are in fact tracking. It is very hard to quantify, but we are seeing weeks of delay in terms of having diagnostic procedures done. That means weeks of delay in physicians' ordering the appropriate treatment for cancer patients and for some cardiac patients. The effect upon the patients who require it and their families, of course, is my greatest concern.

**Hon. Carolyn Bennett:** The sodium fluoride that you suggested can only be used with a PET scanner, Minister. Are you aware of any leadership from the federal government in helping roll out a PET strategy, as the Canadian Association of Nuclear Medicine has asked?

• (1725)

**Hon. David Caplan:** I am not aware of it.

I will say that quite recently I have added PET scans as an OHIP-insured service. In fact, we have one of the largest PET infrastructures in Canada, with ten PET scanners at nine centres. One additional PET scanner is expected to be operational this fall at the Thunder Bay Regional Health Sciences Centre and will be part of Ontario's PET program.

**Hon. Carolyn Bennett:** We have heard that for PET scanning, even though the isotope is much more expensive, centres can only do about 10 procedures a day rather than the 40 bone scans that could be done with the gamma camera.

Are you aware of increased wait times or cancellations or re-booking?

**Hon. David Caplan:** We have not tracked additional wait times for PET scanners at this point. You are quite correct that it is only for bone scans. It is something that we are concerned about and are monitoring, but to date we have not seen an increase in wait times or any backup, as we have in other areas.

**Hon. Carolyn Bennett:** Minister, you said that you've stood up your operations centre in order to track and map the availability of isotopes. Are you aware of whether the federal government has stood up its operations centre?

**Hon. David Caplan:** I have not had any confirmation that the federal operations centre is operational.

**Hon. Carolyn Bennett:** I know that Quebec has offered to help on PET scanning, particularly here in Ottawa, given that there's a PET scanner in Gatineau. They've offered to help New Brunswick, if asked. Are you aware of any leadership exhibited by Sandy McEwan or the federal government in helping provinces to help one another?

**Hon. David Caplan:** Well, I would say quite fairly that Ontario officials have been working with federal officials to be able to monitor and understand the situation. I cannot speak about the efforts with other provinces, but I would characterize the working relationship between the federal government and the provincial government as a good and constructive one.

**Hon. Carolyn Bennett:** Thank you.

In terms of your request for updates, are you saying that up until now you've not really been given updates of the status of the Chalk River reactor or of the international alternatives?

**Hon. David Caplan:** I think one of the challenges is that while we do receive updates, they've largely become known through the media, or they are quite late. To do our planning and to develop any mitigation strategies, we need real-time and quick information.

I would say that the greatest disappointment I've had is that when we were advised that the Chalk River reactor was going down, the original timeframe was for a very short turnaround for its operations to continue. That, of course, has come and gone, and we were told that it would be the summer. That has come and gone, and now we are told that it will be the spring.

I would say, Ms. Bennett, that we need a firm assurance of when that's going to happen, and also what the outlets are going to be, so that we can adequately take the mitigation steps or steps necessary to provide the scans for Ontario patients.

**Hon. Carolyn Bennett:** Minister Aglukkaq has said that—

**The Chair:** Thank you, Ms. Bennett, your time is up.

We go now to the Bloc Québécois and Monsieur Malo, for up to seven minutes.

[Translation]

**Mr. Luc Malo:** Thank you very much, Mr. Chairman.

Thanks to you as well, minister, for being with us this afternoon.

A little earlier you told us you had written to the federal ministers of Natural Resources and Health concerning potential compensation. Can you tell us when you did write and whether you got an answer? If so, what answers did you get?

[English]

**Hon. David Caplan:** Thank you very much.

I did write to the federal ministers. I wrote to Minister Raitt on May 25 about Chalk River going down. I wrote again to Minister Raitt on June 9, and I wrote to Minister Aglukkaq on June 19. The note on June 19 specifically outlined the 40% increase in prices that was anticipated at that point, as well as an additional 30% cost on the members of the Ontario Association of Nuclear Medicine. On August 4 I received a reply from Minister Aglukkaq, dated July 28, and I will quote from the letter:

I appreciate that you have concerns with respect to the rising cost of medical isotopes and the operating cost pressures associated with the shortage situation. The extent to which these price increases are due directly to the shutdown of the NRU is unclear. In fact, both Canada's primary distributors of TC-99m generators notified customers of impending price increases prior to the NRU shutdown in May.

The minister goes on to say:

Further study and analysis is required in order to understand the underlying causes and scale of price increases for TC-99m generators across Canada.

So I must admit I fail to see how there was a lack of understanding of the supply and demand dynamic. I think it is a fairly well understood economic theory that has stood the test of time for hundreds of years.

• (1730)

[Translation]

**Mr. Luc Malo:** If I understand correctly, minister, you weren't reassured about potential compensation. Did you sense, in the ministers' responses, that the government was accepting its share of responsibility in the crisis and in the increased costs associated with short-term solutions?

[English]

**Hon. David Caplan:** That's a very good question.

There have been no assurances that the federal government will assume its share of costs. I was rather disheartened when I read one week ago in a *Globe and Mail* article that Ottawa's response contained no indication that such compensation would be forthcoming. There was a statement from Health Canada that said that "further study and analysis is required in order to understand the underlying cause and scale of price increases".

I urge the federal government to recognize that this problem was caused by the federal government and it bears the responsibility for mitigating its fiscal impact.

[Translation]

**Mr. Luc Malo:** Minister, we know that this crisis and the manner in which it is being addressed in the short term are putting additional pressure on staff in the hospital system. Could you tell us the current state—

[English]

**The Chair:** Monsieur Malo, I've been very patient here. I cautioned you and asked you to keep your questions within the parameters set out in the letter we received from the members of the opposition that gave the direction for this committee. You're straying outside of that. Ms. Bennett also strayed outside of that to some extent. I allowed both of you to go on, but please get back to questions that are better asked of the natural resources committee, rather than the health committee.

[Translation]

**Mr. Luc Malo:** Mr. Chairman, we're talking to a minister of health. I think it is utterly illogical to think that we can talk about anything else than health with a minister of health. If you had wanted to convene anything else but a meeting to discuss the isotope crisis with a minister of health, you would have been in a position to do so. It seems to me it is entirely appropriate, in the context of this study, to ask the minister of health questions on his areas of jurisdiction and expertise as minister of health. If we don't do so, we are missing something important, don't you think?

[English]

**The Chair:** It's the business of the health committee, not the natural resources committee.

On a point of order, Mr. Regan.

**Hon. Geoff Regan:** On a point of order, Mr. Chairman, I asked for unanimous consent to allow Mr. Malo to ask whatever question he wants during his time.

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

**Hon. Geoff Regan:** I'm sorry, I'm asking for unanimous consent and I'm serious.

**The Chair:** You can't do that on a point of order, Mr. Regan, and you know that.

Go ahead, Mr. Malo.

**Hon. Geoff Regan:** Why can you not ask for unanimous consent on a point of order? Sure you can.

**The Chair:** No, you can't.

Go ahead, Monsieur Malo.

[Translation]

**Mr. Luc Malo:** Minister, what would you like to talk to us about since I don't have the opportunity to talk to you about your area of expertise as minister of health? I would like to talk to you about hospital deficits or about the consequences they would have for other areas of hospital operations. I would like to talk to you about health care staff. We know that the NRU won't be in service before the spring of 2010 and that that will no doubt cause a shortage that will continue longer than you had anticipated. I would simply like to know how, with the staff in place and with patients' fears, you'll be able to respond appropriately to all those people.

• (1735)

[English]

**Hon. David Caplan:** Thank you, Monsieur Malo.

Time is a critical aspect of this. Imagine you are a cancer patient or their family and you are finding that you are having weeks of delay with simply having the diagnostic performed to be able to inform what the medical treatment would be. Of course, it backs up and means that the medical treatment itself is delayed. The effect upon health care providers is quite significant as well. Hospitals and diagnostic clinics are finding that they are having to have their staff work significant additional hours and have overtime. It is all connected to the timing of the reactors reactivating and also putting in place the plans, contingencies, and mitigation strategies to enable Ontario's, and I would imagine all Canadian provinces', health care patients and health care providers to be able to deal with this crisis.

As I mentioned earlier, one of the greatest disappointments has been that we had been advised that the timeline for reactivation was to be in the spring of this year. Later, it was the summer of this year. Now it is to be a further eight months from now. We require some certainty to be able to provide the medical diagnostic and medical procedures that Ontario cancer and cardiac patients do require. This is creating a tremendous impact on patients and their families and I don't think the federal government should operate independent of these considerations.

**The Chair:** Thank you, Monsieur Malo.

I'm going to go to Mr. Julian, but I want to read the letter that was sent by five members of the opposition to the committee clerk, and this meeting is a result of that. I want to point out what the opposition asked, what you asked, for the committee to discuss. The last two questioners have been questioning outside the line of questioning that was directed by the opposition members themselves. Let's try to stick to the issue that we are here to discuss. Let's not get onto issues that are better dealt with by the health committee. Certainly if you want to take it to the health committee, you are welcome to do that.

I'm going to read this short letter again to remind members what this committee is here to deal with. This is what was asked for by the opposition.

We the undersigned members of the Standing Committee on Natural Resources request that a meeting of our Standing Committee be convened, pursuant to Standing Order 106(4), in order to study the prolonged closure of Atomic Energy of Canada Limited's NRU reactor at Chalk River, which has resulted in the decrease of supply of medical isotopes and a worsening health care crisis, as well as the future of isotope production in Canada.

I would ask that the members stick to the direction given by the five members of the opposition and also stick to the mandate of the natural resources committee. Again, the health committee, I understand, is going to deal with this issue again. That's great. They've dealt with it in the recent past.

Ms. Bennett, order, please. I've asked you not to speak over the chair when I'm making a statement that I believe is important for this committee to hear.

Now we will go to Mr. Julian's questions.

You have up to five minutes, Mr. Julian, on topic, please.

**Mr. Peter Julian:** Thank you, Mr. Chair. I appreciated your filibuster. I'm sure everyone else did as well.

I thank the health minister for being here, at least in spirit, certainly by telephone, to deal with the worsening health care crisis that is part of the committee's mandate.

I'd like to ask you this, Minister Caplan. You referenced two letters that went to the Minister of Natural Resources, one dated May 25 and the other dated June 9. Did you receive a reply to either of those letters?

• (1740)

**Hon. David Caplan:** Mr. Julian, thank you very much. I did receive a letter from Minister Raitton August 19. Minister Raitt outlined that she felt that the Ministry of Health and Long-Term Care should be commended for the efforts we've had in coordinating and dealing with the current crisis, and she then went on to outline some work that she had commissioned in order to have AECL work on bringing the NRU safely back into operation as soon as possible.

**Mr. Peter Julian:** Thank you, Minister.

So in the midst of a huge medical crisis, it took three months for the minister to reply to a letter from you?

**Hon. David Caplan:** Mr. Julian, I wrote letters on May 25 and June 9 to Minister Raitt and received a reply on August 19.

**Mr. Peter Julian:** Yes, okay. Just for the record, it took three months to get a letter back. I think in the midst of a crisis one would suggest that is, to say the least, an undue delay.

You referenced as well the cost to the Ontario health care system: \$1.7 million to hospitals, \$1.4 million to the ministry itself. You stated that you believed costs would quadruple. What you're suggesting, essentially—and this would be a projection through to next spring—is that the cost to the health care system in Ontario would be about \$12.5 million. Or would it be beyond that?

**Hon. David Caplan:** It is speculative and it is hard to estimate. For example, we know that the Dutch reactor has gone down for maintenance. We know that at one point the South African reactor went down as well.

If there is a disruption in the overall international supply, I think you would expect even greater impacts for the supply of medical isotopes in the supply-demand dynamic and for the costing of medical isotopes, and as this goes on for an extended period of time, there will be impacts on the extent of overtime, burnout, and the effects upon medical staff.

It is hard to predict and hard to project. I'm just using the best estimates that I've received from experts, both within the ministry and within our advisory, of a potential quadrupling if the current state is maintained.

**Mr. Peter Julian:** But it could go beyond that.

**Hon. David Caplan:** It could, potentially. We will continue to monitor that and provide our very best estimates. We won't know or be able to understand it until it is realized, and that obviously will be quite a bit into the future.

**Mr. Peter Julian:** Quebec has indicated the costs so far are over \$10 million, so we're certainly talking about tens of millions of dollars in additional costs to the health care system.

Now, what we've been struggling with around this committee is that there seems to be a lot of response from the government.... Well, certainly it took three months to get a letter out, but generally, the government says it's concerned. But when we actually press the government on what it has done, I think the total to date is something in the order of \$6 million budgeted—not even spent at this point—to address this crisis. That's a lot of smoke and mirrors, but you have to wonder, where's the beef?

Do you believe that this \$6 million, if it indeed has been spent, is adequate given the size and scope of this crisis right across the country? There's the personal suffering, certainly, but when we look at the cost to the health care system across the country as well, do you think that's adequate? And do you think it's fair that it would take three months for a minister just to reply to a letter from the health minister in charge of the largest province in the country?

**Hon. David Caplan:** I know—and it was reiterated to me in the reply from Minister Raitt—that on June 16 Minister Aglukkaq announced that the federal government would provide \$6 million. But I believe that was for research funding to assess alternative medical and diagnostic procedures that could potentially alleviate it. I don't believe it was for any direct funding, compensation, or help for provinces or patients.

I characterized that there is a constructive working relationship between staff at the ministry and staff at Health Canada. I want to assure members of the committee that we are doing our best to work together. I'm looking for leadership at the federal level to recognize the challenge and to redress and mitigate the effect it will have on cancer and cardiac patients, their families, and the health care providers in the province of Ontario and across Canada.

As for the delay in replying to my correspondence, I think those questions would be better addressed to Minister Raitt and Minister Aglukkaq. Perhaps they will provide you with some understanding of what their time imperatives are.

• (1745)

**Mr. Peter Julian:** There has been some discussion around funding for alternative facilities, such as the McMaster research

facility. Has the Ontario government taken a position on that? If so, will the federal government be asked to provide funding to increase the isotope production from that facility?

**Hon. David Caplan:** I believe that on May 29 the federal and provincial governments jointly announced that they would provide some \$22 million for upgrades to the research reactor at McMaster University in Hamilton. My understanding is that that's the only reactor in Canada, other than NRU, capable of using the technetium isotopes. I also understand it's estimated that it will take approximately a year and a half from the time of submission of the proposal until production will even be possible. I'm not aware of any further discussions that have taken place.

**Mr. Peter Julian:** Thank you, Minister Caplan.

I'd like to ask you about the credibility of the government. We've seen three revised dates now for reopening the NRU. We discussed earlier the length of time it took to even get a reply to your correspondence. Do you believe the government is actually taking this crisis seriously?

**Hon. David Caplan:** I'm disappointed that the restart dates for the reactor have not been met, and I'm quite concerned that the reactor won't open until spring 2010. I'm relying upon the federal government to provide a long-term, sustainable supply of medical isotopes.

It might be appropriate to pose those questions directly to the federal ministers. But patients and their families are demanding that we work together to create certainty about a plan. I know that's what I am committed to, and I'm willing to work in partnership with our federal colleagues.

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

We'll go now to Mrs. Gallant.

**Mrs. Cheryl Gallant:** Thank you, Mr. Chairman. I will be sharing my time with Brian Jean.

Saskatchewan has stepped up to the plate and submitted a cost-sharing proposal to the expert panel on isotope supply. Did Ontario submit a proposal to offer a collaborative approach to securing a long-term isotope supply?

**Hon. David Caplan:** In my letter to Minister Raitt I indicated that Ontario would be willing to work in partnership with the federal government to look at securing a sustainable supply. We have not, of our own nature, produced a plan to do so. But I look forward to engaging Minister Raitt and/or Minister Aglukkaq or members of the government in that regard.



**Mrs. Cheryl Gallant:** The whole discussion and fear over the isotope shortage has raised fears about treatment of cancer after it has been diagnosed. Many calls that I'm receiving in my constituency office are from worried patients who are waiting three to six months and longer to have radiation treatment. They think that's a consequence of the isotope shortage, even though they have already been diagnosed.

I understand that 25% of patients who have already been diagnosed are not receiving their radiation treatments within the targeted timelines. What is being done to ensure that the patients who have been diagnosed and are fortunate enough to have family doctors to order the tests are actually getting the treatments they need?

• (1750)

**Hon. David Caplan:** That's a very good question.

In fact, this is one of the areas in which we have taken incredible leadership. I think the Canadian Institutes of Health Research have verified that Ontario leads Canada regarding being able to drive down wait times in certain areas, cancer among them. In fact, that's

why we're building additional radiation bunkers in your end of the province, in Ottawa, but also in Sault Ste. Marie, in Kingston, and in southwestern Ontario as well.

So we are extending capacity to provide radiation and provide it on a more timely basis. We have been seeing, in fact, steady reductions in the wait times that patients have to wait.

The fact of the matter is that in this case, when there is a delay or disruption in the time for diagnosis of cancers, that obviously means that there will be a delay in the treatment of those cancers. This is, I think, of concern to this committee: what leadership is being provided by the federal government in order to mitigate and to lessen the delay that patients and their families are inevitably seeing?

**Mrs. Cheryl Gallant:** Thank you, Minister.

**The Chair:** Thank you very much, Mr. Minister. We appreciate your time here.

Thank you, everyone, for your questions.

The meeting is adjourned.

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