Canadian Nuclear Safety Commission

Commission canadienne de sûreté nucléaire

Public meeting

Réunion publique

January 28th, 2016

Le 28 janvier 2016

Public Hearing Room
14th floor
280 Slater Street
Ottawa, Ontario

Salle des audiences publiques
14e étage
280, rue Slater
Ottawa (Ontario)

Commission Members present

Dr. Michael Binder
Mr. Dan Tolgyesi
Dr. Sandy McEwan
Ms Rumina Velshi
Mr. André Harvey

Commissaires présents

M. Michael Binder
M. Dan Tolgyesi
Dr Sandy McEwan
Mme Rumina Velshi
M. André Harvey

Secretary:

Ms Kelly McGee

Secrétaire:

Mme Kelly McGee

General Counsel:

Ms Lisa Thiele

Avocate générale :

Me Lisa Thiele

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Ottawa, Ontario / Ottawa (Ontario)

--- Upon commencing on Thursday, January 28, 2016,
at 9:03 a.m. / La réunion débute le jeudi
28 janvier 2016 à 9 h 03

CMD 16-M1

Opening Remarks

LA SECRÉTAIRE : Bonjour, Mesdames et Messieurs. Bienvenue à la réunion publique de la Commission canadienne de sûreté nucléaire.

Mon nom est Kelly McGee. Je suis la secrétaire adjointe de la Commission et j'aimerais aborder certains aspects touchant le déroulement de la réunion.

We have simultaneous interpretation. Please keep the pace of speech relatively slow so that the interpreters have a chance to keep up.

Des appareils pour l'interprétation sont disponibles à la réception. La version française est au poste 2. The English version is on channel 1.

Please identify yourself before speaking so that the transcripts are as complete and clear as possible.

La transcription sera disponible sur le site Web de la Commission la semaine prochaine.

I would also like to note that this proceeding is being video webcast live and that archives of these proceedings will be available on our website for a three-month period after the closure of the proceedings.

Please silence your cell phones and other electronic devices.

Monsieur Binder, président et premier dirigeant de la CCSN, va présider la réunion publique d'aujourd'hui.

President Binder...?

THE PRESIDENT: Thank you, Kelly.

Good morning and welcome to the meeting of the Canadian Nuclear Safety Commission.

Mon nom est Michael Binder. Je suis le président de la Commission canadienne de sûreté nucléaire. Je vous souhaite la bienvenue, and welcome to all of you joining us via webcast.

I would like to start by introducing the Members of the Commission.

On my right is Monsieur Dan Tolgyesi; on my left are Dr. Sandy McEwan, Ms Rumina Velshi and Monsieur André Harvey.

We have heard from our Assistant Commission Secretary, Kelly McGee, and we also have with us here today Ms Lisa Thiele, Senior General Counsel to the

Commission.

THE SECRETARY: The *Nuclear Safety and Control Act* authorizes the Commission to hold meetings for the conduct of its business. Please refer to the revised agenda that was published on January 26, 2016, for the complete list of items to be presented today.

In addition to the written documents reviewed by the Commission for this meeting, CNSC staff will have an opportunity to make presentations and Commission Members will be afforded an opportunity to ask questions on the items before us.

CMD 16-M2.B

Adoption of Agenda

THE PRESIDENT: With this information, I would like to call for the adoption of the agenda by Commission Members, as outlined in Commission Member Document CMD 16-M2.B.

Do we have concurrence?

For the record, the agenda is adopted.

CMD 16-M3

Approval of Minutes of

Commission Meeting held December 17, 2015

THE PRESIDENT: I will now call for the approval of the Minutes of the Commission meeting held on December 17, 2015. The minutes are outlined in CMD 16-M3.

Are there any comments, additions, deletions?

Monsieur Tolgyesi...?

MEMBRE TOLGYESI : Merci, Monsieur le Président. I have two questions. One is in paragraph 41 where the Office of the Fire Marshal representative stated that the office would address all of the Committee's feedbacks by January 2016 and there is a note that CNSC staff confirmed the information provided. Did you receive all those informations?

MR. HOWDEN: Mr. Jammal will respond to the question.

MR. JAMMAL: It's Ramzi Jammal for the record.

The information was submitted and our staff attended a meeting in early December with the Office of the Fire Marshal and we are reviewing the information that has been submitted and providing feedback to the

Office of the Fire Marshal. So we are working towards the deadline that was established in the minutes and we will provide the Commission in due course for the next status report on the progress that we have in place.

MEMBER TOLGYESI: And I have another one at paragraph 62, which is specifying that the objectives for the exercise at Bruce Power were expected to be defined in January 2016. What is the progress on that file?

MR. SAUNDERS: Frank Saunders for the record.

The meeting with the Province and CNSC staff is occurring on the 4th of February and that's the first of the planning meetings for the exercise.

THE PRESIDENT: Thank you.

Any other comments?

Okay. Therefore, I will call for the adoption of the minutes.

For the record, the minutes are adopted -- or approved I think is a better legal terminology here.

CMD 16-M4

Status Report on Power Reactors

THE PRESIDENT: The next item on the agenda is the Status Report on Power Reactors, which is

under Commission Member Document CMD 16-M4.

I understand that we have people joining us via teleconference, and let me test the technology.

I understand that Mr. Lehman from OPG -- can you hear us?

MR. LEHMAN: Yes, I can.

THE PRESIDENT: And I have also Mr. Nouwens from NB Power.

MR. NOUWENS: Yes, we can hear you.

THE PRESIDENT: Okay, thank you.

Mr. Howden, I understand you are going to make the presentation. Over to you.

MR. HOWDEN: Thank you.

Good morning, Mr. President and Members of the Commission. My name is Barclay Howden. With me today are our Power Reactor Program Division directors, plus technical support staff who are available to respond to questions on the Status Report on Power Reactors, which is presented in CMD 16-M4.

The document was finalized on January 25th, 2016, and the only updates to report are that Pickering Unit 1 is expected to be back up to full power today, and Unit 6 is expected to be back up to full power around February the 1st.

Please note that the fuelling machine

unavailability for these units is operational in nature and has not impacted safety.

This concludes the Status Report on Power Reactors. Staff are available to answer any questions the Commission Members may have.

THE PRESIDENT: Thank you.

So let me start.

Actually, I was remiss. I also have Mr. Frank Saunders from Bruce Power here to also be available to answer any questions.

So let's open up the question session with Mr. Harvey.

MEMBRE HARVEY : Merci, Monsieur le Président.

One question about Darlington. The problem has been solved, I think, and it's about that high service water flow contributes to increased erosion in the inlet of the end tube, about the exchanger tubes. So that flow is not continuous, like I can see. What has been done exactly? Because I thought that when the reactor is in full power that you need to have a certain flow in the exchanger to get the appropriate power. So if you just give us some information about that.

MR. HOWDEN: Barclay Howden speaking.

Yes. I will let OPG answer the more

technical, but these generators seal oil heat exchangers, so these aren't the main heat exchangers for cooling the reactors, these are heat exchangers on the non-nuclear side for cooling the generator seal oil. The concern that we had had with them was that there was a leak across the tubes that allowed the oil to go into the cooling water, which then went into the lake, so it was more of an environmental.

Mr. Lehman can give you more details on what they have done in terms of reducing the water flow within these heat exchangers to reduce or prevent flow-induced corrosion. So I will ask Mr. Lehman to speak.

MR. LEHMAN: Yes. For the record, Jeff Lehman, Director of Engineering at Darlington site. Thank you for the opportunity to address the Commission this morning.

Mr. Howden is correct, these are very small heat exchangers, they are about a foot in diameter and about 5 feet long, but they are on the secondary side. And those heat exchangers, the root cause was identified as flow-assisted corrosion due to high service water flows on the secondary side. Those flows have since been reduced. We have throttled valves to reduce the flow back to design parameters and, more importantly, we have also replaced all 8 exchangers on all four units. So all those heat

exchangers are new and we would expect no more issues from these heat exchangers.

MEMBER HARVEY: Okay, thank you.

THE PRESIDENT: Thank you.

Monsieur Tolgyesi...?

MEMBRE TOLGYESI : Merci, Monsieur le Président.

This is reporting to Darlington also. The before last paragraph, it starts that:

> "A root cause investigation into this event determined that 'inadequate risk perception around guaranteed devices'..."

Could you explain this?

MR. HOWDEN: Barclay Howden. I can speak and then I think OPG should have the opportunity to comment.

So if you think of this event, you had a single isolation valve that they used to be able to do the maintenance. In an ideal situation you always like to have two isolation valves in case one doesn't hold as well, but that's not always possible. So in order to assure the isolation, this valve needs to be closed securely and needs to be maintained so. In this case this was not done because workers were not fully aware that they had not --

that they could inadvertently bump the valve during the maintenance work, which is what happened. And so OPG, when they did their root cause, determined that they had the inadequate risk perception around these guaranteed devices.

Now, since then, there are two components that we looked at in terms of OPG's response: one, a management component, and one, a worker component.

So the management component was they upgraded the work orders that they use as a reminder to folks, as they put a work order in for work, things to look for; they revised their field planning worksheets to raise awareness; and then they actually delivered training on the new tools as well as on raising awareness.

The worker responsibilities were to take the training on the updated tools, also take the training on becoming more aware and then they have to practise what they have learned.

So from our perspective, since that time -- that was in April 2015 -- there have been significant outages. So the vacuum building outage occurred with all four units down and there have been a couple of other single unit outages. There have been no events, but our staff continues to verify the implementation of these process improvements.

In terms of a root cause, in this

statement here, I would like OPG to comment further from their perspective on how they feel that they are going to prevent this, because we feel that they have put in the right measures, but it was inadequate performance at the time.

THE PRESIDENT: Well, let me piggy-back on that also for OPG to also answer the next sentence. The "ineffective" -- and it's in quotations:

> "...'ineffective evaluation and application of OPEX'."

So this is a generic -- not a compliment exactly, it's a generic statement. I don't know if it applies to this particular event alone or in general because we hear a lot that OPEX is a way of life in this business. Well, here is some pretty harsh criticism.

MR. HOWDEN: Barclay Howden speaking.

In our view, it is generic. I think you have made the statement, because these situations arise in maintenance situations, so it needs to be applied across the whole fleet.

I would like OPG to provide their commentary on that.

THE PRESIDENT: OPG...?

MR. LEHMAN: Yes. For the record, Jeff Lehman. So a couple of items here.

First of all, we have moved over to a different event than the first one. The second event was a leak of heavy water, the first event was a seal oil leak. Mr. Howden is correct, there was a generic statement about two items, about inadequate risk perception and also about the sharing of OPEX, and I will address the second one first.

The sharing of OPEX is related to this particular event, the leakage of heavy water, because there was a somewhat similar event that occurred at Pickering some time prior, and when we did the root cause and we looked at all the potential inputs for our staff, we identified some gaps and some shortfalls that we could have done better in terms of communicating that OPEX, and that was really what that sentence was about, and we have made a number of changes.

For example, again related back to the first issue which was the seal oil leak, I personally shared that particular OPEX with another plant that has the same equipment and actually it had a similar type failure on the seal oil leak.

But again, back to the heavy water leak. OPEX was shared, we have modified our processes for sharing it and how that OPEX is communicated to our staff and to the front-line workers.

The second point about inadequate risk perception, this was related to the workers that actually have hands on the tools. In this particular case, it is quite a constrained area. The worker was actually over top of the valve that he nudged while he was working on the second valve. So PV3 was the second valve, he was working on that and he nudged Valve 1. During the course of that work, one of the learnings was when you are in that situation, when you are in a constrained area, it's very important that the workers that are hands-on communicate that concern to their supervision because there are other mitigating things that can be done and there are other mitigating efforts and actions that we took.

MEMBER TOLGYESI: So when you look at these three statements, "inadequate risk perception," "less than adequate questioning attitude" and "ineffective evaluation," it seems that it's related to training and working procedures. When you were saying that you were working on Valve 3 and Valve 1 is supposed to be locked, so you are supposed to have a locking procedure and I think it was not in place.

MR. LEHMAN: For the record, Jeff Lehman.

In many cases when we are doing this type of work we do lock a valve, an isolating valve, or in fact, as Mr. Howden commented, we have multiple valves. In this

particular case there was not multiple valves available to us and the valve that was nudged does not have a locking mechanism, so we could not lock that valve in place. Now, this is not unusual, there are cases where we need to do this, but in those cases we expect an extra, an additional level of awareness and an additional level of precautions to be taken, and in this particular case that was not done.

THE PRESIDENT: Forgive me for being cynical, I'm not an expert in this, I just don't believe that you should have a valve that can be nudged and cause all this problem. I just don't see nudging as being a cause for this kind of a thing. If that's a cause, then something -- you have to design the valve differently. I just don't understand. In all the tours that I have been in all those plants, I have never seen a valve that I can nudge without some pretty strong torque being put onto it. What am I missing here?

MR. LEHMAN: For the record, Jeff Lehman.

So there are a number of valves that, you know, can of course be locked in position. This was not one of those. One of the aspects of the root cause is to look at other valves that could be susceptible to this. The work on PV3, the work on the other valve in question, it was quite intense. They had difficulties removing this valve. There were workers that were basically challenged

moving the valve and getting it out and in so doing impacted Valve 1, the valve in question. So you are correct, this is not a situation that we would normally deal with, it is particular to this specific situation and we have expanded our scope to look at other valves that may cause a similar problem.

THE PRESIDENT: Thank you.

Ms Velshi...?

MEMBER VELSHI: Thank you, Mr. Binder.

A question for Point Lepreau -- or actually staff on these different assessments that have been done as part of their probabilistic hazard assessment. So are those reports now publicly available?

MR. HOWDEN: Barclay Howden speaking.

May I ask Point Lepreau to speak to that?

MR. NOUWENS: For the record, it's Jason Nouwens, Regulatory Affairs Manager.

Derek Mullin is with us. He is our Senior Technical Advisor for Reactor Safety and he will provide an answer to that question.

MR. MULLIN: Derek Mullin for the record.

Those reports are now available. We are currently working on a website release or a website posting similar to what we posted at the end of 2014 to inform the public of the status and the potential impact it might have

on Point Lepreau.

MEMBER VELSHI: So it's within the next few weeks, a month or so, or is it a longer timeframe?

MR. MULLIN: I would expect it closer, in the near term. However, we need to have further discussions with our responsible person at Point Lepreau for our public disclosure protocol, just on the exact timing. I'm not aware of the exact timing right now.

MEMBER VELSHI: Thank you.

Maybe, staff, you can just let us know when it is publicly available.

MR. HOWDEN: Barclay Howden speaking.

And we will. In terms of the regulatory assessment, as you can see, we are almost done it and I can give you initial feedback that no showstoppers in reviewing it. There is a couple of procedural documents on the wind, high wind section that OPG -- Point Lepreau will be updating and then we are done we will issue -- we will close those two action items and you will get the full update at the regulatory oversight report in August. But when those are posted we will let the Commission Secretariat know.

MEMBER VELSHI: Thank you.

THE PRESIDENT: We made a pretty strong commitment about publicly releasing this seismic study. I

remember, if memory serves, they were due to be tabled and discussed the end of 2015. Was that the timeline?

MR. HOWDEN: That's correct. That was the due date, and they submitted the final. They had posted the draft and this final version that they submitted, I believe in October of 2015.

THE PRESIDENT: So are you going -- is the plan to present it to the Commission in some future proceeding?

MR. HOWDEN: Barclay Howden.

We would include an update and then we can customize the update for the Commission around the regulatory oversight report in August of this year, if the Commission wishes it at that time or whether you would want it as a separate item. But we have tried to bring our regulatory updates with that report and in some cases you will notice that we do put sort of additional emphasis on some of the newer ones and that one could be put in for sure.

THE PRESIDENT: It may be a specific, in addition kind of focus item.

MR. HOWDEN: We will do that, thank you.

THE PRESIDENT: Okay, thank you.

Dr. McEwan...?

MEMBER McEWAN: Thank you, Mr. President.

This is a very generic question but it relates to the AMP for OPG. In your report you say on two occasions OPG made unilateral decisions to cease corrective actions necessary for compliance. That strikes me as unusual. I hope it's an unusual event. How often does it happen? And how often and what in the way of sanctions do you have for a licensee that arbitrarily decides to do that?

MR. HOWDEN: So you're basically asking, Barclay Howden speaking -- asking us about our enforcement strategy.

So from the standpoint of dealing with licensees and OPG in general, this is something that does not occur very often and that's why this enforcement action was taken. But we do have graduated enforcement. But because we have onsite inspectors we have a lot of discussion with these issues as we go forward and we want the licensees to take advantage of those inspectors being there when they are considering taking actions such as this.

That's all I can really say generically because I think if you understand more of the details of this you would understand what the nature of the enforcement action is. And because OPG has until February 11th to determine whether they want a review, if they do

then the Commission would get all the details to see what our enforcement strategy is.

But we do have a process map that drives us through the enforcement strategy and so we always want to use the lowest form which is normally discussion, but then you can go to other forms such as issuing action notices and directives with inspections.

We can issue 12(2) letters which is basically a formal request under the general *Regulations*. We can issue an order if we feel unreasonable risk is being posed at that moment in time or we have AMPs.

In this case you'll note that when you read the AMP you will see that the conclusion was that unreasonable risk was not in place, but the concern that it could occur in the future.

MEMBER McEWAN: So, again, keeping this at a very generic level, it seems to me one of two things can occur. The licensee will say, "We don't want to do this, go away" or "We don't want to do this for the following reasons. Can we have a conversation about it?"

Is either of those intervenable by the staff on the site? So if we have a decision, we don't want to do this, so we are not going to talk to you and we will not do it; where would that process go?

MR. HOWDEN: Barclay Howden speaking.

So the licensee is responsible for safety and we are responsible for regulatory oversight. The relationship between the two, it's rare that they would say, "We are going to do this and go away", that there would normally be a discussion. Often there could come down to the point where there is a disagreement over whether this is a regulatory requirement or not a regulatory requirement.

The staff works on behalf of the Commission and the staff takes a view and works with its management team. If it's a very difficult situation which it can actually go up to the Executive Vice-President who is responsible, ultimately, and we discuss it and then we will go back down and discuss with the licensee. In most cases the licensees are trying to put in mitigation measures that are appropriate but sometimes there is things that they don't -- that a discussion with the staff to fully understand what the regulatory requirements are is necessary.

So a lot of the work we do is try to make sure the licensee understands fully what the regulatory requirements are so when they are making decisions within that they make effective decisions.

THE PRESIDENT: Thank you.

We are going to the second round. Mr.

Harvey...? Mr. Tolgyesi...?

MEMBER TOLGYESI: At Pickering when do you expect that fuelling machine will become available because you have two reactors which are operating below full power due to unavailability of this fuelling machine?

MR. HOWDEN: Barclay Howden speaking.

Miguel Santini can speak to that. There is actually two fuelling machines that are not functioning properly. They are now because they are bringing them back up to power. I will ask Mr. Santini to provide a little bit more information.

MR. SANTINI: Miguel Santini, for the record.

We have been in front of the Commission explaining the reliability issues of the Pickering A fuelling machines and, as you may be aware, OPG has made a considerable investment to increase the reliability of these machines. Perhaps OPG could expand a little bit more.

So thanks to this proactive approach to increase the reliability of the machine, we haven't seen failure of these machines for a while. You might recall three or four years ago that this was on almost every single status update to the Commission. There were issues with the fuelling machine. The problems since then have

been resolved and now it seems that it is recurring again. Perhaps OPG could expand on that.

The thing to note is that this is more of an economic issue than a safety issue. Obviously, everybody would prefer the reactors to work 100 percent because it is the configuration that is best known but working close to 100 percent is not a safety issue.

Perhaps OPG again could expand on the issues currently ongoing with the fuelling machines.

MR. MANLEY: Good morning. For the record, Robin Manley, Vice President, Nuclear Regulatory Affairs & Stakeholder Relations at OPG.

First, let me start by pointing out that overall OPG's forced loss rate at Pickering in 2015 was the best in Pickering's history ever. In part, that is due to improved fuel handling and fuel machine performance in 2015. That was a key contributor to the fact we have got our best forced loss rate ever.

We are in the execution phase of some comprehensive fuel handling reliability and excellence plans which we are continuing to work. The goal of these plans is to improve the fuelling machine reliability through some targeted rehabilitation work on the equipment and that's also coupled with improvement of performance in our maintenance and operations around the FMs, the fuelling

machines.

We have seen measureable improvements and we have to continue to execute the plans that we have in place and that is to continue to drive the performance and reliability of the equipment to the desired levels.

THE PRESIDENT: Thank you.

Ms Velshi...? Dr. McEwen...?

So just one quick question to Bruce Power. I understand that now you are planning to do some of the refurbishment. Just can you give us a little bit of a quick -- on the time arising when first refurbishment will start?

MR. SAUNDERS: Yeah, Frank Saunders, for the record.

The intent is to start the first unit in 2020 and we would start with Unit 6 early 2020 and move forward from there.

We provided a fairly detailed letter to staff which provided all the indicative timelines. You know, on some of them it might extend over 10 years, so it's a little hard to say that the ones at the tail end are going to be exactly when they say they are but, you know, that's the intent to start then.

You will notice in our submission to you that we suggested to pull the licence ahead from 2020 to

2018 so the Commission has ample time to study the implementation plan and the global assessment report before we get to that effort. We're pretty much on track to do that. We began submitting the safety factor reports last year. We are still doing it this year. Your staff was already actively engaged in reviewing those.

So we believe we can put all the technical information in front of the staff and then the Commission sometime in 2018 to allow you to do a license decision.

THE PRESIDENT: Thank you. Anything else?

Okay. Thank you very much. I'd like to move now to the next item which is the Event Initial Report regarding the transport accident involving uranium concentrate near Swift Current in Saskatchewan.

So some people joining us via videoconference in Saskatoon and I understand we have staff from CNSC, Cameco Corporation and RSB Logistic and they are available online.

Sorry? Oh, there you go, video. I can see you guys now. Can you hear us?

MR. STEWART: Yes, this is William Stewart from Saskatoon. We can hear you.

THE PRESIDENT: Okay, thank you.

We also have Mr. Kristoff, from the Saskatchewan Ministry of the Environment. He is coming to

us by teleconference, by phone. Can you hear us?

MR. KRISTOFF: Good morning. I'm here.

CMD 16-M8/16-M8.A

Oral presentation by CNSC staff

THE PRESIDENT: Great.

So I'll turn now to CNSC staff presentation. I understand that, Mr. Moses, you are going to make the presentation. Over to you.

MR. MOSES: That's correct.

Good morning, Mr. President, Members of the Commission. My name is Colin Moses and I am the Director General of the Directorate of Nuclear Substance Regulation.

With me today are Mr. Sylvain Faille, Director of the Transport Licensing and Strategic Support Division as well as other CNSC staff involved in the response and review of this event.

Also with us today via video conference from the CNSC's Saskatoon office are Mr. William Stewart, Senior Project Officer in the Uranium Mines and Mills Division -- Mr. Stewart was the responding inspector to this event, and was present onsite throughout the recovery operation. He is joined in our office by staff from Cameco

Corporation as well as RSB Logistic Inc., who are available to answer any questions related to the event.

We are here today to provide you with a summary on the transport event that occurred near Swift Current on January 11, 2016, as outlined in CMD 16-M8.

Before I get into the presentation, I would just like to note a minor correction for clarity. It's the last sentence of section 2.1 of the CMD that speaks to the radiation measurements at the site. The sentence should read that the initial radiation measurements taken Tuesday morning were taken by the CNSC inspector at the exclusion zone and reported to the CNSC headquarters. Those levels were measured to be approximately 0.5 µSv/h with a background of 0.3 µSv/h.

So turning to the event, on January --

THE PRESIDENT: Sorry. You are going too fast for us.

MR. MOSES: So section 2.1 --

THE PRESIDENT: Page 4, the last sentence?

MR. MOSES: That speaks to radiation measurements.

THE PRESIDENT: Gamma radiation level?

MR. MOSES: That's correct. I just wanted to clarify that measurements were taken by the CNSC inspector.

THE PRESIDENT: Okay. Fine.

MR. MOSES: So on January 11, 2016, CANUTEC, which is Transport Canada's emergency centre; RSB Logistic, the carrier for the shipment and Cameco, the licensee to which the shipment was destined, contacted CNSC staff to report that a shipment of natural uranium concentrate was involved in a road accident on Highway 4, approximately 10 kilometers south of the city of Swift Current or north of the city of Swift Current, Saskatchewan and 260 kilometers south of Saskatoon. The event occurred at around 12:30 p.m. Central Standard Time, and all the times in this presentation are local time or Central Standard Time.

Throughout the response, it is worthy to note that the area was secured by the Royal Canadian Mounted Police, or RCMP, and that appropriate exclusion zones were in place to ensure that there was no risk to the health and safety of the public as a result of the event.

The shipment itself consisted of 63 steel drums, each containing natural uranium concentrate, also referred to as "yellowcake", in powdered form and stacked two high within a 20-foot ISO freight container loaded onto a trailer.

Each drum contained approximately 273 kg of yellowcake for a gross mass for the container of

18,590.5 kg, which is the weight of each drum plus the weight of the container.

The total activity of the shipment was reported as approximately 330 Gigabecquerels.

The shipment originated from Heathgate Resources PTY Ltd. in Australia and transited through the port of Tacoma in Washington State, on its way to Cameco's Blind River facility for processing.

For background, under the *Packaging and Transport of Nuclear Substances Regulations, 2015*, *PTNSR*, the uranium concentrate is classified as radioactive material, low specific activity group-I or LSA-I and must be transported in accordance with those Regulations and the *Transportation of Dangerous Goods Regulations* from Transport Canada.

The packages used for the transport of LSA-I material do not require certification by the CNSC but are required to meet design requirements for Industrial packages Type I specified in the *International Atomic Energy Agency Regulations for the Safe Transport of Radioactive Material, 2012 Edition*.

The package type used for this shipment, Type IP-1, is the package type commonly used worldwide by the industry for the transport of uranium concentrate.

In accordance with Transport Canada's *TDG*

Regulations, an Emergency Response Assistance Plan is required for the shipment of low specific activity material in Canada.

RSB Logistic Inc. was the carrier involved in this accident.

RSB Logistic Inc. was the carrier involved in the accident. RSB Logistic Inc. is a transport company located in Saskatoon, Saskatchewan that offers transport services, including freight forwarding services. RSB Logistic Inc. has many years of experience transporting radioactive materials.

For this shipment, the steel drums were stacked two high and secured within the ISO freight container as shown here on this slide. This is the typical configuration used for such shipments. Note that this picture does not show the actual container that was involved in the accident.

The event occurred at approximately 12:30 Central Standard Time on Highway 4, approximately 10 kilometres north of the city of Swift Current. The vehicle carrying the ISO freight container drifted onto the shoulder of the road, overcorrected and ended up off the road and overturned. As the truck slid forward the container rolled onto its end, as shown on this slide.

The driver of the vehicle had minor

injuries as a result of the accident, suffering from a bruise on his shoulder caused by the seat belt. The driver was treated on-site by emergency personnel and did not require hospitalization. No other vehicle was involved in the accident.

The pictures on this slide show the final position of the vehicle and the ISO freight container after the accident.

As shown in the pictures, the container detached from the front of the trailer, and ended up with the doors of the ISO freight container, or the rear of the container, in the upright position.

So to run through the immediate response, the accident occurred at approximately 12:30 local time and police and first responders, including the fire department and paramedics, were immediately called to the scene to respond to the accident.

Noting the transport involved dangerous goods, the fire department contacted CANUTEC, who notified the CNSC' Duty Officer as the accident involved radioactive material under Class 7 Dangerous Goods.

The first responders secured the site and assessed the situation, closing a one kilometer section of the highway as a precautionary measure due to the concern that the container may fall back onto the road.

By 13:20, the transport company, RSB Logistic, had notified CANUTEC, Cameco and CNSC of the accident and provided initial details of the situation along with pictures of the vehicle on the side of the road.

CNSC staff remained in communication with the first responders on the scene to provide advice as needed. CNSC staff also contacted Cameco to obtain further information and confirm that they have activated the Emergency Response Assistance Plan and that response personnel were on their way.

At the same time, Cameco dispatched emergency response personnel from their Saskatoon office via a charter plane. Additional personnel followed by road with equipment. In addition, Cameco requested support from Envirotec, their HAZMAT contractor.

Throughout this initial response, CNSC staff remained in communication with first responders and Cameco to keep abreast of the situation on the ground.

By 15:25, the CNSC issued its first communication on the event via its social medial channels.

At 15:30, Mr. William Stewart, a CNSC inspector from the Saskatoon office, was dispatched to the scene to provide regulatory oversight of the recovery operation.

At 17:00 emergency response personnel from

Cameco and Envirotec were on scene. Upon arrival they assessed the situation, and established an exclusion zone for contamination control purposes.

The CNSC inspector, Mr. Stewart, was briefed on the status of the recovery and the initial assessment upon his arrival at 20:00
Due to the increased risk to health and safety of working in the dark with the potential instability of the vehicle and the container, responders decided to begin the recovery operation the next morning.

The highway remained closed and site security was arranged for the night to ensure constant surveillance of the accident scene.

Committed to early and regular communications with the public, the CNSC began posting information on the transport accident in the afternoon of January 11th, providing frequent updates throughout the recovery and cleanup operations.

More detailed information on the transport accident was provided on the CNSC website to inform the public on the status. In addition, media reports covered the road closures and the accident on January 11th, 12th and 13th.

The recovery operation began on the morning of January 12, 2016 at 8:00 a.m.

Safety measures including Personnel Protective Equipment and medical aid and response measures were discussed and put into place prior to the start of the recovery operations.

Initial radiation measurements were taken by Mr. Stewart at the boundary of the exclusion zone. The gamma dose rate was measured to be approximately 0.5 µSv/h with a background of 0.3 µSv/h, which was as expected and within acceptable limits.

Mr. Stewart, as well as representatives of Saskatchewan Ministry of the Environment, the Office of the Fire Marshal and local fire and RCMP services were present to oversee the recovery operations.

As shown on this slide, a crane was initially used to stabilize and secure the ISO freight container, while a second crane was used to recover the tractor and the trailer.

Firstly, the trailer was lowered to the ground, and the truck and trailer was monitored for contamination by Cameco staff. The monitoring confirmed that there was no surface contamination on either the truck or the trailer.

Once this was confirmed, the truck and trailer were released from the site and moved to a towing yard in Swift Current.

Following the removal of the vehicle from the scene, Cameco staff examined the ISO freight container in order to determine if there had been any release of uranium concentrate from the container.

One area, around a visible breach in the side of the container, shown on this slide, was identified as having potential contamination.

Cameco staff swiped this area and confirmed the presence of localized contamination on the exterior surface of the container.

This was cleaned with a HEPA vacuum, and the breach was sealed using expanding foam.

This slide shows staff from Envirotec cleaning the exterior surface of the ISO freight container using a HEPA vacuum.

The picture of the right shows the Envirotec staff carrying contaminated material to be placed in a package to be sent for disposal.

As shown on this slide, Cameco brought a steel overpack to the accident site in order to proceed with the transport of the damaged ISO freight container to a licensed location where it could be securely opened to assess the condition of the steel drums inside.

The damaged ISO freight container was lowered on the ground using two cranes as shown on this picture.

For the recovery and packaging of the container, the steel overpack was opened by removing the top portion, leaving the base attached to the vehicle to allow the loading of the container.

The container was lifted and placed on the base of the steel overpack. The top portion of the overpack was then lowered over the ISO freight container. The loading activities were conducted and concluded under artificial lights in the evening of January 12th.

Because an oversize and overweight permit from the Province was required to allow the shipment to proceed, a verbal authorization from the provincial authorities was given to allow the vehicle loaded with the steel overpack to be moved to same local yard as the damaged vehicle until the permit could be obtained.

Once obtained, the steel overpack was transported to Cameco's Saskatoon transit warehouse, and arrived on January 13, 2016.

Once removed, Cameco staff conducted further radiation surveys of the ground in the area where the accident occurred and confirmed that there was no residual contamination.

On the evening of January 13th, the local highway maintenance crew removed the accumulation of snow and reopened the highway for traffic once the overpack and the response equipment were removed.
Overall, the highway was closed for a period of approximately 30 hours.

As indicated in a previous slide, the steel overpack was transported to Cameco's Saskatoon transit warehouse and arrived on January 13th.

It remains there today, and, to update the information on this slide, we understand that Cameco intends to move the overpack to their Blind River facility, where the conditions of the drums inside the ISO freight container can be assessed and safely unloaded.

The CNSC inspector on site provided regulatory oversight by ensuring that the recovery plan addressed the protection of the health and safety of workers, the public, and protection of the environment and is satisfied of the actions taken by Cameco in response to the accident.

CNSC staff observed that the regulatory requirements were respected.

The first responders took immediate actions and contacted CANUTEC. CANUTEC, as well as the consignor and carrier promptly, contacted the CNSC to

report the event, and the consignor and carrier responded effectively in implementing their emergency response plan as required by the regulations.

In addition, the CNSC proactively disseminated information over social media about the transport event within hours of being notified of the event. and provided frequent updates as the recovery operation proceeded.

CNSC staff also recommended Cameco to post information related to this event on their web site.

In conclusion, there has been no radiological impact on the health and safety of workers, the public or the environment as a result of this event.

The driver of the vehicle did suffer minor injuries, but those were not caused by the radioactive properties of the material being transported.

Although there was a minor release of uranium concentrate, it was located only on the exterior surface of the ISO freight container, and was easily contained and cleaned.

Finally, there was no releases of radioactive material to the environment as a result of this accident.

This concludes CNSC staff's presentation, and we remain available to answer any questions the Commission may have.

THE PRESIDENT: Thank you.

So I'd like to start the question session with Ms Velshi.

MEMBER VELSHI: Thank you, Mr. President.

So I'd like to start off by complimenting all the players. It looks like a model response, and certainly on slide 20, you have captured all the things that went well.

But maybe I can ask each one of you whether it's -- starting with staff. We can go to Cameco, the Ministry of Environment and RSB Logistics.

You report back -- and I'll talk just about the emergency response for now.

What were some things that could have gone better? What were some of the learnings?

So we'll start with CNSC staff.

MR. MOSES: Colin Moses, for the record.

I'll just preface my answer by saying in this case, I don't think it could have gone better, but, for example, one of the things we did learn is to leverage our regional offices and leverage our inspectors that are out in the field.

So in this case, Mr. William Stewart is ostensibly responsible for oversight of mines and mills, but we leveraged his expertise in the transport of dangerous goods from previous experience to provide appropriate oversight of this event.

So one of the lessons learned is to ensure that the staff that we do have out in the regions, although primarily focused on specific areas of our regulatory oversight, ensure that they have appropriate training in terms of transport of dangerous goods or other emergency response so that they can provide that oversight in accidents that may occur.

And I believe that will ensure that we can respond more promptly to these events, so in this case, I think it worked very well, but that was one of the -- an example of one of the lessons learned that we did learn.

MEMBER VELSHI: Okay. Cameco?

MR. MOONEY: It's Liam Mooney, for the record.

I would only echo Mr. Moses' statements that, in the debrief, we were very pleased with how the response was managed and, ultimately, ended on a very positive note.

We have had the time to conduct a debrief with the regulatory agencies involved, and we -- it's one

of those circumstances where we walk away without necessarily anything that we see that could have gone better in the circumstances.

MEMBER VELSHI: So had this not happened in Saskatchewan, would it have been a lot more challenging for you?

MR. MOONEY: It's Liam Mooney, for the record.

Our emergency response assistance plan requires us to be able to provide a timely response, and we have a third party contractor, Envirotec, who would be able to assist us in wherever that accident may occur on a shipping route.

MEMBER VELSHI: Thank you.

Saskatchewan Ministry of Environment, any learnings for you?

MR. CHARETTE: Not really. We felt the incident went as well as possible.

It was planned well, it was deliberate, and it was executed really well.

If anything, the importance of some additional training or correspondence with everybody, all the players. It's always nice to know these people before you meet on the side of a highway in January in Saskatchewan, so I think just, for the future, meeting the

people, any training scenarios, anything like that that goes forward cooperating amongst the agencies with that would be great.

MEMBER VELSHI: Thank you.

And RSB Logistic, anything from your end?

MR. ECKEL: George Eckel, for the record.

From our perspective, it -- the recovery was executed as good as we had expected it could be. There was no surprises whatsoever.

MEMBER VELSHI: Very good. Thank you.

THE PRESIDENT: So just to -- so what was the -- anybody, what was the cause of the accident?

Did -- was it -- what was filed with the police or wherever you file cause of accident?

MR. ECKEL: George Eckel, for the record.

It was driver error, basically went onto the shoulder and correcting the unit caused it to be pulled into the ditch and rolled over.

THE PRESIDENT: So -- but again, the root cause, was it speed, substance?

I'm just trying to -- I know any one of us who have ever been into an accident, there's an intense determination of the cause of the accident, so why did it go to the shoulder?

MR. ECKEL: George Eckel, for the record again.

Just veering to the shoulder. For the exact reason is unsure. He just was not in his traffic lane. And when he corrected, like I say, it caused it to go down into the ditch and roll.

THE PRESIDENT: So there was no filing about the speed at the time, whether tiredness.

Again, I'm not -- I'm not trying to investigate. I'm just trying to understand whether an accident report -- was an accident report filed anywhere.

MR. ECKEL: George Eckel again.

Yes, there was an accident report filed. We got a report from the driver as well.

He was drug and alcohol tested post-accident. Results confirmed that he was in compliance the entire time. And it was just simply inattentive and was not in the driving lane.

THE PRESIDENT: Thank you.

Dr. McEwan?

MEMBER McEWAN: Thank you, Mr. President.

And I'll add my congratulations to those of Ms Velshi.

If I look at slide 6, which has the picture of the drums in a container, how well secured are they within the container?

Because as I look at that, there is a significant gap between the top of the second level of drums and the roof of the container, and there also seems to be an opportunity for anterior-posterior movement within the container.

So in an accident like this, there seems to be a lot of opportunity for the drums to be significantly thrown around.

Am I wrong, or are they actually attached and constrained within the container?

MR. MOSES: Colin Moses, for the record.

Perhaps I'll let Cameco respond to how they package and transport their -- they package those containers first.

MR. MOONEY: Sure. It's Liam Mooney. I'm joined by Marc-André Charette, our Director of Transportation and Security and Regulatory Relations.

The drums in question, the configuration that's shown on slide 6 is how the drums were packed by Heathgate, as an example.

That's not necessarily how Cameco packs our drums, but both are properly secured in accordance with

the international requirements. And we understand that for the shipment in question, that packing configuration had been reviewed by the applicable Australian authorities.

So I can ask Marc-André Charette to give you a bit of a sense on how we pack our sea containers.

MR. CHARETTE: Hi, it's Marc-André Charette, for the record.

In Cameco's instances, we do not have two layers of sea container -- of drums inside the sea container. We only have one layer.

We also use a bulk board at the front -- or at the back of the sea container where the doors, and we have plywood that's on top of the drums that are -- using cord strapping, are secured to the anchor points inside the sea container.

The configuration used by Heathgate, you can see some of the cord strapping. That's also used in their instances to secure the drums.

MR. MOONEY: So I think it comes back -- sorry, it's Liam Mooney again, for the record.

So there's -- there is some differences between how material's packed but, ultimately, it is properly secured and in compliance with international requirements.

MEMBER McEWAN: So for the external contamination to have occurred at the site of -- almost looked like a puncture wound -- that would be a direct puncture through to a drum or it would be a drum escaping and rattling around inside?

MR. MOONEY: It's Liam Mooney, for the record.

We haven't had the chance to open the sea container in question to determine that. When we do at Blind River, we'll have a better sense in that regard.

It could be conjecture at this point, having not opened the sea container.

It's securely packed in the overpack, and the plan is to move it, having regard for the scanning that was done before it was released from the tow yard in Swift Current. Rather than reopening the package and creating any additional risk we'd prefer to do so at the Blind River refinery in a controlled environment.

MEMBER McEWAN: So will we get a report back on that once that opening and inspection's happened?

MR. MOSES: Colin Moses, for the record.

Yes, absolutely. Once that has happened, we can report back to the Commission.

THE PRESIDENT: Just a piggyback question.

So how often such accident occur, if ever?

MR. MOSES: Colin Moses, for the record.

This is the first such occurrence in Canada that we're aware of. There has been an incident with a marine shipment that was discussed a couple years ago which involved uranium yellow cake, but in terms of such accidents, to my knowledge, this is the first one that has occurred in Canada.

MR. FAILLE: Yes, Sylvain Faille, for the record.

In the other -- the only other one that involved uranium concentrate was the MCP Altona tunnel, which was the shipment by sea that we reported to the Commission a few years ago.

In terms of road shipments, those are very infrequent.

There's been some instances of small contamination found where drums were not properly sealed, and that was contained within the sea container. And those are minor reports that have been reported throughout the years, but it's very infrequent.

THE PRESIDENT: Thank you.

Mr. Tolgyesi?

MEMBER TOLGYESI: Merci, Monsieur le président.

You were specifying that there was an accident where a container was dropped, I think, in the Halifax harbour.

This container was a similar type?

MR. FAILLE: Sylvain Faille, for the record.

No, actually, if you -- well, if you remember the accident in Halifax, there was a -- what we refer to as a flat rack, which is the same base as those containers, but it was a certified transport package on top of that. So it was just the base of those containers with two sides.

So in terms of the specific, yes, it was similar, but the package that was involved in the accident was a certified package, which is designed to resist accidents.

MEMBER TOLGYESI: So this container was designed also to resist some kind of drop or impact.

MR. FAILLE: Sylvain Faille again.

Those containers are the regular containers that are used for marine shipments in general. They have to -- they are designed to certain requirement. They're why they're referred to as ISO freight containers.

There's some testing requirement, but they're not the design requirement similar to the certified packages, certainly.

And even the -- in this case, the container was more the overpack to carry all the drums, and the drums inside the overpack are the packages in this case. And those were designed to meet the requirements specified in the IAEA regulations.

MEMBER TOLGYESI: And you know, did you open the container -- eventually it was opened now. And what was -- my question, what was the damage to those drums. Was there a leak?

Because, you know, we see some contamination outside. That means something should be broken inside also.

THE PRESIDENT: Mr. Harvey?

MEMBER HARVEY: Merci, Monsieur le président.

Like my colleague, I must show my appreciation for the reaction of all the intervenors.

The only question I have, it's about the container. It was a quite severe accident and there has been no contamination on the -- on the ground and that.

So does the container and the drums meet your expectation in that sense that it did resist? But if

I compare to the -- you were talking of that ship in Vancouver where the damages were more than that and there has been contamination in the ship, but there, there was no contamination.

Was it the same type of container and the same type of drums?

MR. FAILLE: Sylvain Faille, for the record.

Yes, they were very similar -- similar ISO freight containers and similar drums. Inside, the packaging arrangement was slightly different, as explained by Cameco, where they don't have two layers of drums inside the containers. But apart from that, yes, they are very similar design in terms of drums and the ISO freight containers was very similar in both cases.

MR. MOSES: I'll just add that once the container's open, we'd have a better idea of whether, as Mr. Faille mentioned, that the packages or the actual drums inside the containers. So once the container's opened, we'll be able to comment better on what -- how they performed during the accident.

MEMBER HARVEY: And you would come back anyway with a report, and if there's something to correct or to modify, that will be made after that.

MR. MOSES: Colin Moses.

Yes, that's correct.

MEMBER HARVEY: So some kind of arrangement inside the container, things like that.

Thank you.

MR. JAMMAL: It's Ramzi Jammal, for the record.

To answer the question to you, Mr. Harvey, with respect to comparison, the fundamental principle here is the severity of the accident and the putting in place the sea cans.

The event that has occurred of the shipment going to China were completely different, so the root cause analysis demonstrated in the ship itself the anchoring of the sea can was not done in accordance with the transport requirements.

So the events itself and the severity of the events and the root cause are completely different.

On the inside, our staff will be doing the oversight to make sure that the IP containers or the industrial packaging fulfilled its duty in according with the IAEA requirements.

So two separate things. The physical sea container in the ship itself at the time and a root cause analysis has demonstrated that the anchoring of the sea

cans was not done appropriately, and that's why some of the damage occurred and caused the spill.

But we will provide you with more update with respect to the hot wash in the response, and the integrity of the container on the inside.

But I would like pass on to Cameco to see, have they opened up the container on their own site? And if they can provide you with any updates.

MR. MOONEY: It's Liam Mooney, for the record.

The overpack container hasn't been opened yet. Our plan is to have that shipped to Blind River for the week of February 1st.

The general manager at Blind River was not available and requested that he be present when that work was undertaken.

It's also taken us a bit of time to secure the necessary permits to move the overpack. As was stated in staff's presentation, it is overweight and oversize, so some additional permitting's required to move it to Blind River.

THE PRESIDENT: Thank you.

Ms Velshi?

MEMBER VELSHI: I have a question around the surveys and confirmation around spread of contamination.

So the incident happened on the 11th. Recovery didn't start till the 12th because it was nighttime.

So were any surveys done on the first evening just to confirm that there, indeed, was no contamination to worry about spread off?

MR. MOSES: I'll refer that question to Saskatoon to explain exactly what they did on site.

MR. STEWART: This is William Stewart from Saskatoon.

When I arrived on site, the scene was secured, but the container was still in a, shall we say, precarious position, so people could not actually get close to the container. And so the Cameco staff on site indicated that the scene was secure, but they did not provide me with any measurements at that time and said we were going to wait until we could get near to the container to take measurements the next morning.

MR. MOONEY: It's Liam Mooney, for the record.

I'd add that the product in question has heavier specific gravity than lead, so in the

circumstances, with the visual observation that we were able to make on the day, the determination was, having regard for conventional safety, the better course was to come back in the morning and be able to secure the sea container, and then work around it.

But I wanted to emphasize that it was a low-risk situation having regard for the product in question.

MEMBER VELSHI: Thank you.

So the next day, when the CNSC inspector took the surveys, and we were told at the exclusion zone it was 4 µSv/h, very low, but a little higher than backgrounds, is that significant and would have been caused by, you know, that little bit of yellow cake on the container?

MR. MOSES: Colin Moses, for the record.

It's not significant. It's what would be expected in proximity to the container even if it was fully intact and there was no contamination releases. So the measurements are really a measurement of the gamma radiation that's emitting from the uranium that's contained within the package.

MEMBER VELSHI: Thank you.

Go ahead.

MR. STEWART: Sorry, just for

clarification, it was 0.5 µSv, not 5 µSv.

MEMBER VELSHI: Yes, thank you, 0.5.

I'm wondering more on the capacity to do surveys when it's late at night, and if there had been a larger spill or leakage there wouldn't have been any constraints in doing so. I know you have to weigh the conventional risk and so on, but just to make sure that there wasn't going to be happening a whole lot of spreading in the night.

MR. MOONEY: Liam Mooney, for the record.

The risk would be people ingesting or inhaling the product, and would have to get very close to it to do either or those things. The product in question does not lend itself to becoming airborne. So securing the site gives us the comfort that those risks are mitigated and we would be able -- even with a larger amount.

Some of the estimates I've seen have put the amount I question at -- was picked up with the vacuum and the towelling around 100 grams, so a really small amount of uranium in the circumstance, and it was appropriately dealt with.

THE PRESIDENT: But, again, I just want to put things in perspective about the safety case, and I think you made an important point.

Let's assume that there was a complete

spread of all the yellow cake on the road. It's still the toxicity here, it's not the radioactivity that's of concern. So am right?

You know everybody thinks it's nuclear, and therefore you have to quarantine and close the road and all that, but it's you just don't have to come close to it so you don't inhale it. Is that really the safety concern, it's not the radioactivity? Am I right or not, staff?

MR. MOSES: Colin Moses, for the record.

Yes that's correct. I mean, as Mr. Mooney mentioned, the real concern in terms of dealing with this equipment is an inhalation hazard. It's a very low risk. And as shown in the pictures and as observed by our inspector on the scene, the protective equipment that was used by the responders is appropriate to protect them against that.

THE PRESIDENT: So let me ask you a question. And, again, so was it -- the reaction of closing the highway for 30 hours, was that an overreaction or is that the appropriate -- I think, because I assume it's a major highway here we're talking about. So closing it completely for 30 hours seems to be excessive if there is no safety issue.

MR. MOSES: Colin Moses, for the record.

Again, the hazard was really a

conventional health and safety hazard, and also to allow the location of the response equipment. On some of the pictures you can see the cranes are blocking the entire highway as they were stabilizing the container. So that's really why it was closed for the full 30 hours of the operation: to allow --

THE PRESIDENT: So it wasn't because fear of radiation, it was because of the actual -- just the physical retrieval of the stuff, right?

MR. MOSES: Colin Moses again.

As well as sort of allowing the positioning of the equipment. As was mentioned in our presentation, there was contamination control provisions put in place to ensure that there was no possibility of spread of contamination, and those were around the vicinity of the container. And that is an appropriate response just to ensure the protection of the personnel is in place.

THE PRESIDENT: Ms Velshi.

MR. MOONEY: Sorry, it's Liam Mooney, for the record.

And I'd only add that the highway was closed, but there was a detour provided. And with the way the grid roads work, that's why you end with quite a significant detour above and below the accident, if you will, if you're looking north and south. But that's the

way the grid system works in Saskatchewan: that it took a mile on either side, really, to allow an effective detour.

But, ultimately, it goes back to what Mr. Moses said: that having the highway closed allowed the flexibility and the safety for the people retrieving the truck and trailer, as well as the sea can.

THE PRESIDENT: Thank you.

Dr. McEwan?

MEMBER McEWAN: No questions.

THE PRESIDENT: Mr. Tolgyesi.

MEMBER TOLGYESI: The initial response crew came from the local police, the first responders, fire department. Considering the location, there is no -- Swift Current there is no uranium mine or processing plant close.

To what extent this initial response intervenors are informed and trained on the risks and how they handle, for instance, specifically radioactive material? Are they trained? Because it could happen elsewhere, even further, not in Saskatchewan, in northern Ontario, and if they don't -- you know, how do they handle that, how they are trained?

MR. FAILLE: Sylvain Faille, for the record.

All the first responders -- first of all, all the first responders receive the *Emergency Response*

Guidebook that is produced by Transport Canada, with the assistance of the U.S. Department of Transportation, and also the one in South America.

That includes all of the dangerous goods that are transported, along with some emergency measures to take, as first responders: how to secure the site and what needs to be taken into account, and that information was also attached to the transport documents for the shipment.

That would be the first layer. The second one is on the transport documents there are emergency phone numbers to be called. In this case that's why the first responders called CANUTEC, and that's how the Emergency Response Assistance Plan was activated, and Cameco was notified and sent their team to do their cleanup.

That's the first part, which is applicable to any shipment of dangerous goods across Canada. Like I said, the documentation is there on every fire truck, and police cars and ambulances. They all have that book available to them. It gives the firsthand information as to how to deal with a product, depending on what is being transported.

On top of that, there's also training, as you mentioned. And when we received the called from CANUTEC, we were also in contact with the fire department to provide assistance as needed. In this case they

indicated some of them had received training and they were okay.

They didn't need our assistance in this case, but we also offer that as part of the service. When we get a call from CANUTEC or from the first responders on the site, we will call them back and make sure we're in contact with them to offer support as needed.

MR. MOSES: Colin Moses, for the record.

I'll also just add that the CNSC does offer training to first responders, and we've delivered that training across the country to a number of different responding groups. In fact, we just delivered training late last year, in Montreal, for example, to first responders there.

So it is a service we offer. In this case I don't believe it was offered by the CNSC to the Swift Current department in particular, but we do offer training to ensure that first responders are aware of the precautions that they need to take when dealing with hazardous material.

MEMBER TOLGYESI: Should transporters communicate a route path where they transport radioactive or dangerous goods, because, you know, it's a route path how we go, where go, so if some things happen you could determine, you know, what material is transported, or this

is not the obligation for a transporter?

MR. FAILLE: Sylvain Faille.

There is no requirement in any of the regulations in Canada that requires transport companies or companies that are providing or are offering to transport dangerous goods to indicate the routes that they're taking. Some of them do, some others don't, and that's irrespective of the type of material being transported, either radioactive or others.

There's no requirement for that, but some of them do as a -- just to make sure that there's good responders on site if there's an accident, but it's not a requirement under the regulations.

MR. MOSES: I'll just add, as Mr. Faille mentioned earlier, it's really a multi-layer of protection. So first responders across the country receive training on how to appropriately secure a site and establish initial protective measures. And then on top of that any transport of dangerous goods requires contact information for those who are trained to respond to the specific type of good that's being transported, and those can be brought to the scene.

So it's really about, you know, initial securing of the site to ensure that there's no risk, immediate risk, and then subsequently having the people

that are trained and have the appropriate equipment to respond adequately to recover from the operation and do any cleanup as necessary.

THE PRESIDENT: Thank you.

Monsieur Harvey? Anybody else? No?

So just one last question. I'd like to hear from RSB, and maybe Cameco, what kind of training and qualifications do you require from your drivers? Anybody can apply for this job? Do they get training? What's the requirement? Is there anything special about these kinds of drivers?

MR. ECKEL: George Eckel, for the record, RSB.

Our drivers, upon hiring, they get initial orientation training in both dangerous goods and specific Class 7 training, and they get recurring training every two years as well during the employment.

THE PRESIDENT: So --

MR. MOONEY: It's Liam Mooney, sorry.

I was just going to add to that that we do audit RSB on an annual basis and look for the necessary assurances in relation to that training, but also the management systems around transportation. We've been doing that for a long time, and are impressed by the systems that they have in place, and their safety record in general

speaks for itself.

THE PRESIDENT: So they will be aware of, in case of an emergency, what needs to be done, who to phone? Was it the driver that phoned in asking for help or is it somebody else? Who called the first responders?

MR. ECKEL: George Eckel, for the record.

To my knowledge I did not receive the first call, someone in our office did. I believe a passerby came along the accident while the driver was still in the processing of getting out of the truck. So as he left the vehicle, he approached the vehicle that had stopped, and that individual was already on the phone, I believe, to the local police, and then they contacted our office.

THE PRESIDENT: But the driver would be aware of what procedures to take --

MR. ECKEL: Absolutely. Yeah, the driver has the documentation with the emergency contact numbers, as well as the *Emergency Response Guidebook*, relevant information for when first responders arrive.

THE PRESIDENT: Okay, thank you.

Anybody else?

Okay, thank you. Thank you very much.

Are there any other events that the CNSC Staff would like to bring to the attention of the

Commission?

MR. MOSES: Colin Moses, for the record.

We would like to present a Significant Development Report for an occurrence at the Chalk River Laboratories at CNL. I believe you have received a memo and a short presentation with some slides related to this.

THE PRESIDENT: So I understand that there is a status update on component failure during preparation for transport of spent NRX fuel rods at the Canadian Nuclear Laboratories, and I understand some familiar faces will bring us up to date to this.

Over to you, Mr. Pilkington. Or staff, who goes first here?

Report on a Significant development following an occurrence at the Chalk River Laboratories operated by Canadian Nuclear Laboratories

MR. MOSES: I'll give you an overview of the event, and then we are available, as well as Staff from CNL, to field --

THE PRESIDENT: Go ahead.

MR. MOSES: -- any questions that you may have.

So, again, good morning.

With me today are Mr. David Newland, the Director General of the Nuclear Fuel Cycle and Facilities Regulations Directorate; M. Sylvain Faille again; and M. Christian Carrier, the Director of the Nuclear Laboratories and Research Reactors Division, as well as M. Pierre Tanguay, Senior Project Officer with the Nuclear Laboratories and Research Reactors Division.

So we're here today to report a significant development following an occurrence at the Chalk River Laboratories, which is operated by the Canadian Nuclear Laboratories, or CNL for short.

In late November 2015, CNSC staff was informally notified of an occurrence at the Chalk River Laboratories in Chalk River, Ontario, involving the failure of a fuel caddy during the preparation of spent National Research Experimental, or NRX, fuel assemblies for transport to the United States. This shipment was part of the repatriation project under the Global Threat Reduction Initiative.

So to start I'll provide a bit of background on the design of the transport package.

The package itself is referred to as the NAC-LWT transport package and it's used for the shipment of the NRX fuel.

The package is designed by an American-

based company, NAC International Inc., who holds both a CNSC and a U.S. certificate for this package design.

This package is used for the transport of a variety of different fuel designs, and as such a variety of internal components have been designed to accommodate different fuel designs, while the exterior of the package remains the same.

Referring to the figures in your memo, and as shown on the presentation, as part of the preparation for the shipment of the NRX fuel, each NRX fuel assembly is inserted into a caddy.

So the first picture shows the caddy, consisting of an aluminum tube 5.1 centimeters in diameter and 0.25 centimeters thick, which is closed at one end with a welded plate.

The caddy is inserted into a fuel basket which holds 18 caddies, shown on the second diagram.

Once all the fuel assemblies are loaded into the fuel basket, the end plate is installed on the fuel basket and the basket is placed within a shielded transfer cask and removed from the pool.

The basket is then loaded into the NAC-LWT package, which is the third image, and on the next side, with the use of the shielded transfer cask.

Note that the caddy itself does not

provide any structural integrity for the transport package.

The loading of the NRX fuel in the caddy and the loading of each caddy within the fuel basket are conducted underwater within the NRU reactor fuel bay.

And recognizing that a picture is worth a thousand words, we have obtained certain pictures from CNL which illustrate the operation, and I'll just run you through the operation very quickly.

So this diagram shows the operational flow diagram for the transfer of fuel from the waste management area into the transport container. So essentially the fuel is retrieved from the waste management area, transferred to the NRU fuel bay, the fuel is retrieved and placed inside the caddies, which are then loaded in the basket and transferred to the cask via a shielded transport cask.

The next slide shows the operations in the NRU fuel bay, and where they occur. I'll note the third arrow points to the caddy loading area, which is where the failure occurred.

On the next slide you can see in the first picture a series of empty caddies that are used in the operation and the second slide shows a caddy that has been loaded with the fuel assembly. The final picture on this slide shows the loaded caddy in one of 18 positions in the basket.

And just to give you an idea of scale, that last picture, the entire diameter of the caddy is 2 inches, or 5 centimeters, so it's approximately that large.

The fuel basket is shown on the next page. The basket is loaded at a basket loading station, and in the second picture, although I will note that this is showing a picture of NRU fuel rods not NRX fuel assemblies, shows a loaded basket.

The basket is loaded into a temporary transfer cask, which is then moved outside and used to load the package using the crane shown in that final picture.

So back to the event.

On October 28th, 2015, CNL staff was loading NRX fuel within caddies when the bottom plate of the caddy failed during the loading operation. This resulted in the fuel assembly falling on the pool floor.

CNL was able to retrieve the fuel assembly from the floor, conducted an inspection, and confirmed that the assembly had not suffered any damage.

CNL subsequently suspended all loading operations of the caddies within the NRU fuel bay and began a visual inspection of the 29 previously loaded caddies.

Although the loading operations of the fuel within the caddies had been suspended, a NAC-LWT transport package that had been previously loaded the week

before the caddy failure was shipped the next morning immediately -- or shortly after the event on October 29th, 2015.

The visual inspection performed by CNL staff revealed that two more caddies, which had not yet been loaded, had visible cracks in the weld of the bottom end plate. As a result, CNL notified NAC, the owner of the transport package, of the caddy failure on November 2nd, 2015.

CNSC staff was verbally informed of the event by CNL on November 27th, 2015, during a regular progress meeting on NRU operations. CNL also informally notified CNSC at a CNSC-CNL monthly meeting on December 3rd and at a subsequent senior-level meeting on December 4th, at which time CNSC staff requested a formal report on the event, as required by the *Packaging and Transport of Nuclear Substances Regulations, 2015*.

A preliminary report giving general details of the event was submitted to the CNSC on December 11th, and was followed by a formal event report submitted on December 17th, 2015.

As the NAC is a U.S.-based company, CNSC staff also informed the U.S. Nuclear Regulatory Commission of the event on December 7th, and has been in communication with the U.S. NRC on a regular basis since becoming aware

of the event.

As a result of the October 28th event, CNL initiated a root cause analysis, which was submitted to the CNSC on January 25th, 2016. This addresses both an assessment of the caddy failure, as well as the failures in their management system and safety culture that allowed a shipment to occur on the day following the caddy failure and identified some corrective measures to be implemented.

CNL has also requested NAC to assess the condition of all package components related to the repatriation project in order to ensure that all meet their design requirements. They have scheduled an on-site audit of the NAC Quality Program, as well as NAC's corrective actions in relation to the weld failure on the caddy.

In regards to the failure, NAC's preliminary assessment indicates that the failure occurred because the welders who performed the welds were not adequately qualified for the type of welds used on the caddy. NAC has removed all existing caddies from service and are proceeding to produce new ones as the previously manufactured caddies will not be used.

Following CNSC staff's review of information submitted to date by NAC and CNL, CNSC staff concur that only the caddy was affected by the weld deficiencies and that the integrity of the transport

package was not compromised. In addition, there was no damage to the fuel or releases as a result of this occurrence.

Although there was no impact on the health and safety of persons or the environment as a result of this event, a review of the information provided by CNL identified deficiencies in their management system.

Firstly, the *Packaging and Transport of Nuclear Substances Regulations, 2015* require an immediate report to the CNSC of any package showing evidence of damage that may impair its ability to comply with its certificate, with a full report required within 21 days. Despite these requirements, verbal notification was provided only after 30 days and the formal report was provided 50 days after the occurrence.

Additionally, and as noted previously, an NRX fuel shipment that had been previously loaded took place 12 hours after failure of the caddy in the NRU reactor fuel bay, this despite the event from the previous day. The delay in reporting to the CNSC and the fact that the shipment proceeded shortly after the event and before the implications of the event could be adequately assessed are indicators of potential weaknesses in CNL's management system and safety culture.

CNSC staff will assess the information

submitted by CNL to ensure that the proposed corrective measures to be put in place by CNL will address both the specific circumstances of the event as well as any potential weaknesses in their management system and safety culture.

CNSC staff will also review the information provided by NAC, as well as the U.S. NRC's assessment report of the event, and finalize its assessment. CNSC staff will follow up on any actions that may affect the Canadian certificate or use of the NAC-LWT transport package within Canada as necessary and are planning an inspection of the quality assurance practices in place at the manufacturing facility to ensure that the certificate requirements are being met.

CNSC staff will consider appropriate regulatory action based on its assessment of the information submitted by CNL and the circumstances of the event and will report the results of CNSC's assessment at the Commission meeting in April 2016.

This concludes our words. We are welcome to field any questions you may have.

THE PRESIDENT: Thank you.

CNL, do you wish to make any comments?

MR. PILKINGTON: For the record, Dr. Binder, its Bill Pilkington. I am the Vice President of

Operations and Chief Nuclear Officer for CNL, and I have here with me today Tammy Hobbes, who is the Director of HEU and Fuel for CNL. We are here to answer any questions the Commission might have today.

THE PRESIDENT: Thank you.

So who wants to start?

Monsieur Harvey...?

MEMBER HARVEY: Well, I would start by saying that my reaction is a reaction of deception. I have been on the Commission for many years, almost 10 years, and we have had many issues with AECL before and with you now, and deception because it's a basic thing just to report and one would say that well, we didn't know if we have to report or not, but at the moment you ask that question, you do report.

I don't know -- I will ask you how it can happen. I don't know if there is an answer to that, but I will ask that question, how come from the field to the top of the structure nobody cared about reporting? Well, it took 30 days I think to report. So what is your answer to that?

MR. PILKINGTON: So we do care about reporting and when the event occurred there was a delay in communications. The first priority of the workers involved was to verify the integrity of the fuel that had been

involved in the failure and to recover the fuel and recover the end plate of the caddy that had broken off.

When the event was in fact reported up to the senior management in NRU, because this work was taking place in the NRU rodbay , the NRU management looked at it from the perspective of the licence and Licence Condition Handbook around the operation of NRU and determined -- they made a determination that it was not reportable. In hindsight, we should have made a determination that it was and reported it at that time.

We did in fact initiate an internal event investigation based on the event and we did categorize it internally as a Level 2 event, which is our second tier of degree of seriousness, and proceeded with our own investigation. However, that investigation proceeded on our internal timelines, not on the CNSC reporting timelines.

So we would look to be more conservative in the future and look to initiating reports to the CNSC and then retracting reports if in fact the event turns out to be non-reportable. The challenge is that early after an event not all of the information is always available and it would appear that sometimes our decisions on reporting are not sufficiently conservative.

MEMBER HARVEY: I want to hear the staff

about that. Was that a reportable event?

MR. MOSES: Colin Moses for the record.

Yes, it was reportable under the *Packaging and Transport of Nuclear Substances Regulations*. So to paraphrase the Regulations -- and I know I probably shouldn't do that -- but essentially they require reporting of any occurrence that might indicate that the package might not meet the requirements of its transport certificate, and in this case with the failure of the caddy, that caddy is part of the certificate and part of the application for certification that was submitted to CNSC staff and therefore its failure would require reporting under those Regulations.

MEMBER HARVEY: But when you decided that it was not a reportable event, so you didn't even think that you could discuss with the staff if it was a reportable event or not, you decided by yourself without having any discussion with the staff in place or the staff here in Ottawa?

MR. PILKINGTON: So the determination of reportability was made by the CNL organization and that is our practice.

In terms of discussions that occurred, there were informal discussions with CNSC staff and the question of reportability was raised. However, the

distinction is we were looking at this as reportability under the CNL licence and Licence Condition Handbook. We failed to look at it in the early stages of this event as a failure in the packaging and transport of nuclear substances.

MEMBER HARVEY: But the moment this event could have had an influence on the package already ready to be shipped, you didn't have any question about the security of the other package?

MR. PILKINGTON: So when the initial failure occurred -- and this again -- the loading of the caddy was being done under water. When the initial failure occurred, the crew believed that the failure would have been due to an issue with the operators loading the fuel into the caddy. They made that assumption. They didn't think more broadly or consider that the failure could be to a defect in the caddy. And remember that all of the components at this point were underwater and it took several days to be able to recover them and to look at the damage.

So it was that incorrect assumption and not considering the potential for broader implications that caused us not to initially see that as a potential weakness in the packaging.

THE PRESIDENT: I need some more

clarification. You mentioned that you looked at it from the Licence Condition Handbook. I'm trying to understand, how do you determine the non-reportability under the LCH? Forget about whether it came under the Transport Regulations or not. Take any event, how do you figure out what's reportable?

MR. PILKINGTON: Bill Pilkington for the record.

So we would look at the reporting conditions as laid out in the Licence Condition Handbook and determine if any of those had been met.

THE PRESIDENT: So there is another clause, if memory serves, that talks about proactive disclosure. You guys are responsible for this clause, if memory serves you that you remember that. We appeared many times in front of parliamentary committees and they want to know everything that goes on in your facilities and that's how the famous proactive disclosure came about. So why are we now five years later debating what's reportable under some regulatory requirement and whether it should be proactively disclosed whether it is reportable or not?

MR. PILKINGTON: Bill Pilkington for the record.

I can't debate your point. I can only offer that we agree that we need to be more conservative in

our decision-making on reportability and we will proceed to do so.

THE PRESIDENT: So for staff, whether it's reportable or not reportable, why did it take so long for you guys to insist that it become disclosed?

MR. MOSES: Colin Moses for the record.

I don't believe it did take long between becoming aware and when we insisted that it was disclosed. We have -- in the context of the repatriation meetings, we have regular updates on the project and it was mentioned during the project that this failure occurred and at that meeting Mr. Ramzi Jammal formally requested that an event report be submitted to the CNSC.

THE PRESIDENT: But your submission says that staff were aware November 27th. The incident occurred October 28th. November it was verbally conveyed and it was only the senior executive who insisted that it will become disclosed. Did I not get this right? That's what I heard you just say.

MR. MOSES: Colin Moses for the record.

Perhaps Mr. Newland might want to provide some additional meetings, but CNSC staff are onsite at the facility and do attend occasional operational meetings conducted by CNL and it is at one such meeting that a mention of the event did occur. But Mr. Newland will...

DR. NEWLAND: Dave Newland for the record.

So I think in the discussions with staff, between CNL staff and our site inspectors and our project officers, the focus was more on the failure of the caddy in the fuel pool and the fact that the assembly had dropped, and so the focus for is that reportable was on that action in the NRU pool and that was not reportable.

THE PRESIDENT: Do staff have to think that there are two requirements, there is reportable in some regulatory requirement and there is proactive disclosure? When do you decide whether something is proactively disclosed or do we need to clarify that too?

DR. NEWLAND: Dave Newland for the record.

So I would start off by saying that I think CNL has a good culture of reporting, of keeping our staff informed of events and operational incidents, and certainly in the case of this particular when the caddy failed, this was an operational incident and that was the way that I believe CNL treated it and it was certainly the way we treated it.

On the question of proactive disclosure, I think maybe there could be better guidance provided.

THE PRESIDENT: Ms Velshi...?

MEMBER VELSHI: So again going through with reporting and disclosure, so when did CNL become

aware, when did you complete your inspections and find out that of the 29 previously loaded caddies, two of them had cracks in them?

MR. PILKINGTON: I would ask Tammy Hobbes to answer that question.

MS HOBBES: This is Tammy Hobbes for the record.

We completed that inspection on the evening shift of November 2nd.

MEMBER VELSHI: So on November 2nd you knew that it wasn't just a single operational issue, that there was a more systemic problem with the caddies? So again, we are coming to the timeline. November 2nd they knew that, hey, this is a bigger problem than just the operational issue -- so I don't think the pieces quite fit -- that the alarm bells started ringing that this is a big issue, people need to be notified of it. So at CNL, I would question staff to look at it as well and did you appreciate the seriousness of this and what was the disclosure required?

Even us as Commission Members, the first time we heard of it was just last week. This is months later after the incident has happened. So I think there is a whole lot of learnings from here, a lot of reflection that is required, not just on what the reporting

requirements are but what should they be and how do we make sure that proper reporting and disclosure gets done and that people appreciate the seriousness or potential seriousness of this.

So again, November 2nd you knew it was more than an operational issue; correct?

MS HOBBES: This is Tammy Hobbes for the record.

I need to correct myself, it was actually November 3rd. So it was just one day, but...

MEMBER VELSHI: Okay. So still in that timeline?

MS HOBBES: Yes.

MEMBER VELSHI: You know, it wasn't November 27th when staff were unofficially notified of it. By that time they knew it wasn't just an operational issue, or should have known?

MS HOBBES: This is Tammy Hobbes for the record.

That is correct. Once it became -- once the management team became aware of the issue, which was on November 3rd, we immediately went into our formal processes of filing impacts and making sure that all of the appropriate senior management was notified.

MEMBER VELSHI: Right, other than the

regulator.

THE PRESIDENT: Dr. McEwan...?

MEMBER McEWAN: Thank you, Mr. President.

So the 28th of October there was the operational failure. How often does that occur?

MR. PILKINGTON: So that was the first time in the process of loading HEU fuel into caddies, baskets and casks for shipment to the Savannah River site. So that was the first occasion that we had a failure of this type. And this is a new process to us because we are in the early stages of this program, so it would be an operation unlike the types of operations that occur routinely in the NRU.

MEMBER McEWAN: But it was an operation that had been performed previously to this event?

MR. PILKINGTON: That is correct. There were a number of -- excuse me, I'm just trying to get the number. And it's Bill Pilkington for the record. This was the second -- I'm sorry, the third basket was being filled and each basket has 18 casks in it -- I'm sorry, 18 caddies in it. So the operation have been going on for a period of time.

MEMBER McEWAN: So this was a new operation. Within that new operation, it was an unusual event. So between the recovery of the failure, what was

the timeline to inspecting the caddy that had failed in that operation?

MR. PILKINGTON: I will ask Tammy Hobbes to speak to that.

MS HOBBES: This is Tammy Hobbes for the record.

The failure occurred on Wednesday, October 28th, evening shift. The caddy failure was inspected the following day shift at the end of the day shift and that was following the actual shipping event.

MEMBER McEWAN: So you knew that the caddy had failed on the 29th?

MS HOBBES: This is Tammy Hobbes for the record.

The failure actually occurred on the evening shift of the 28th and we knew the failure occurred. As Mr. Pilkington stated earlier, the crew believed that it was probably an operator error and they did not -- it did not enter their consideration that it could be something other than an operator failure. When they did the inspection the following day, it still looked like just a weld failure and so they, in coordination with other discussions, decided to do a full inspection of the 29 loaded caddies at their first opportunity, which did not occur until Tuesday, November 3rd, evening shift.

MEMBER McEWAN: Okay. But I think I misspoke. So you understood that there was a weld failure that caused the operational failure the 29th?

MS HOBBES: This is Tammy Hobbes for the record.

I believe you are correct.

MEMBER McEWAN: So the shipment had gone. Did you communicate with the shipper to say that there may be potential problems with the shipment as it was en route? Did you try and pull it back?

MS HOBBES: This is Tammy Hobbes for the record.

No, we did not communicate with the shipper. At that point we communicated with NAC International, who is the cask owner, that we had this failure and by the time that we communicated with NAC, which was on Monday, November 2nd, the shipment had already arrived in Savannah River.

MEMBER McEWAN: So I think you said that you had had -- before the discussion I think on the 27th of November with staff, you had had an informal discussion with the staff onsite about this operational failure?

MR. PILKINGTON: Bill Pilkington for the record.

I am not aware that we had any discussions

with staff until November 27th.

MEMBER McEWAN: Yes, I thought I heard you say that you had. So what I can't wrap my head around is you have an operational failure of an unusual process, you said it was a new process to your organization, you then inspect it one day later and you find that there is a weld failure and you don't even think to even mention it to the CNSC staff onsite?

MR. PILKINGTON: Bill Pilkington for the record.

I am not aware that we had any discussions with the CNSC staff onsite at that point.

MEMBER McEWAN: How often would you be communicating with CNSC staff onsite on a regular basis, just routine operational issues?

MR. PILKINGTON: Bill Pilkington for the record.

So that varies. The staff at site are doing surveillances and so they are in and around the facilities in discussions with various levels of staff in our facilities. I would say it would not be uncommon for there to be a period of weeks between a discussion of a senior person in the facility and one of the CNSC staff onsite.

THE PRESIDENT: But given that this is

kind of a new process, particularly shipping to Savannah, staff, were you not interested in observing this loading and shipment? I thought you would be curious about that one.

DR. NEWLAND: Dave Newland for the record.

Yes, indeed, we are curious and Mr. Moses tracked you through the process of getting NRX fuel out of the waste management area all the way to trucking it to Savannah River. We have been through and inspected and done rounds on each of the sort of steps of that process to understand it ourselves and to ensure that it's being done safely. Now, we don't do that -- we go and do an inspection on each of those individual elements, but we don't do it for every shipment. And so, for this particular event it was in the evening and staff would not have been there, but we have had regular inspections and rounds on that whole process for sure.

THE PRESIDENT: So the next morning when it goes, when they ship to Savannah, staff were not there? In other words, was this kind of a process already preapproved before they shipped it with what turns out to be a deficient caddy?

DR. NEWLAND: Dave Newland for the record.

Yes, that is the case.

MEMBER McEWAN: So the shipment arrived in

Savannah River. Did you phone Savannah River and say, hey guys, you may have bad welds which may impair the integrity of the caddies?

MS HOBBES: This is Tammy Hobbes for the record.

When we completed the inspection of the 29 caddies on Tuesday, November 3rd, which was an evening shift, and realized that there were two additional caddies with cracked welds on the bottom, we notified Savannah River immediately the next day, on November 4th.

MEMBER McEWAN: But you didn't let Savannah River know on the 29th that you knew there was a cracked caddy?

MS HOBBES: This is Tammy Hobbes for the record.

When the inspection was done on the failed caddy on October 29th, the day after the failure during the loading operations we could not really tell at that point, other than the failure had occurred, what the extent of the problem might be. We did not notify Savannah River at that point.

THE PRESIDENT: Monsieur Harvey...?

MEMBER HARVEY: Just about the staff, because when you detected that problem, you stopped the operation, you stopped to --

MR. PILKINGTON: So Bill Pilkington for the record.

Yes, as soon as the bottom broke out of the caddy, all operations were stopped in the NRU rod bay, and in fact it will require a decision-making meeting between the project and the NRU staff to resume that.

MEMBER HARVEY: My question was to the staff. You didn't notice anything -- I mean the staff onsite didn't notice anything about the fact that the operation was stopped?

DR. NEWLAND: Dave Newland for the record.

Perhaps Mr. Tanguay would have some information regarding that.

MR. TANGUAY: Pierre Tanguay for the record.

This failure was seen as an operational occurrence. It is fairly common that things will happen on a daily basis. So CNSC staff did not become aware of this incident, as we said, until much later. So we did not -- we were not aware of these operational situations that took place on the 28th of October until much later.

DR. NEWLAND: Dave Newland for the record.

Just to add that that does not mean to say that we don't become aware of them. We have monthly meetings with NRU staff to go through events that have

happened at the facility.

MEMBER HARVEY: But you know that there was a process to ship some quantity of used fuel to Savannah. I mean probably you knew that and just walking in the plant and then suddenly you detect that the operation is stopped. So it wasn't possible for the staff to detect that just by normal circulation or walking through the plant?

DR. NEWLAND: Dave Newland for the record.

In this particular instance, no. If you look at the time between when the caddy failed and the shipment, it was really -- it happened during an evening shift and then the shipment went in the morning and so staff were not there.

MR. MOSES: Colin Moses for the record.

I will just add that it's not necessarily a continuous operation. So they are not continuously loading caddies and loading baskets and loading the canisters, so staff wouldn't necessarily become aware of a suspension. It's really worked around the operation of the NRU, and perhaps CNL can speak a little bit more specifically about the schedule.

MEMBER HARVEY: Yes, but my point was that by the fact we do have staff on the site and the staff has not to wait until the end of the month to know if there is

a problem. So this is one of the reasons why the staff is there. So while I don't think that the monthly meeting is the only, well, task of the people --

DR. NEWLAND: Dave Newland for the record.

I completely agree and I think that staff are going to take a look at how we have done compliance oversight on the site overall and we are going to take some lessons learned about how we can do things perhaps better.

THE PRESIDENT: Particularly since it's a new operation. I mean this is shipping to Savannah, which I thought kind of is a new process. I think that you would have been on top of them like a wet blanket at the beginning to make sure that some of those shipments will proceed properly because it's a new operation.

DR. NEWLAND: Dave Newland for the record.

Certainly, it's a relatively new process. We have done a number of inspections and reviews, but we are going to go back and look at did we do everything that we could have done, was the oversight appropriate, and then put into place changes from any lessons that we learned.

THE PRESIDENT: Okay, thank you.

Monsieur Tolgyesi, I'm sorry I skipped you here.

MEMBRE TOLGYESI : Merci.

What's this page? No, it's not -- there

is a NAC report which is saying that:

> "This failure of this weld joint is not necessary for criticality safety." (As read)

Do you have -- because there is a manufacturer of these caddies and what happens eventually, what they are saying is that the welders were not qualified to perform this work. So do you have audits? Because usually if it's a new business, it's something that you didn't do before. So do you have any audits of a caddy manufacturer? So you go to see what they do, how they do, who is performing that, if it's according to -- do you have a team who is inspecting the caddy and transportation devices?

MR. PILKINGTON: It's Bill Pilkington for the record.

So the design of the caddies was done by NAC under contract from CNL and the manufacture was done by a subcontractor to NAC. When we did our own investigation we found that we had weakness in the cascading of our engineering requirements through the process of procurement and we also found that we had weakness in our QA surveillance of the manufacturing. So that's an area where we will be making improvements going forward.

MEMBER TOLGYESI: You know, you were

shipping these caddies to Savannah. The next morning you already knew that it happened the night before. You will do the shipment even if it's going to Australia or to Pakistan, you will do the shipment without advising the regulator or without any discussion with whoever?

MR. PILKINGTON: Bill Pilkington for the record.

My understanding is that for things requiring an export permit, if it was going out of country, we would have applied and received in advance of shipment the required permitting. The containers have the required certification in this case in Canada and in the U.S., and so there is no final CNSC approval required in order to initiate the shipment. All of the approvals are put in place in advance of the shipment.

MEMBER TOLGYESI: So it will go without any further discussion or permitting because you have in advance -- all those permits you have in advance?

MR. PILKINGTON: That's correct. So it's our responsibility to confirm that we have met all the requirements to be able to ship. And I would point out in this case there was an opportunity of 12 hours duration in order to avoid sending the last shipment to Savannah River. I believe that creates a challenge in itself given the nature of the operation of caddy loading and the fact that

the failure was expected to be an operating problem, not expected to be a material problem with the new components of the caddies that were being loaded.

We will endeavour to be more conservative in those judgments and more open in considering what could be the possible cause of an event. Nonetheless, it would be challenging to make that determination and stop the shipment on the basis of a low probability there could be a problem with the equipment.

MEMBER TOLGYESI: You know, on your staff report which is sent to Marc Leblanc and Ramzi Jammal, on page 4, you are saying that:

> "Delay in reporting and shipment proceeded shortly after are indicators of potential weakness in CNL's management system and safety culture." (As read)

I consider it is not potential, it is actual serious weakness.

But there is something else. You know, I was listening to what you were saying. Mr. Mullin said that the caddy incident is operational, so not reportable necessarily. On the other side, Mr. Moses said the event was reportable according to Transportation Regulations. So that is something which, you know, you should make sure

that you are playing the same violin and the same tune, you know.

MR. MOSES: Colin Moses for the record.

I think you are correct. We are actually in the process of developing a regulatory document that outlines reporting requirements for these types of facilities, and one of the things we have done in that is to combine not only the sort of specific reporting requirements that are applying through the licence but also to consolidate all the other reporting requirements that are embedded throughout the Regulations, and I think that will go a good way to clarifying exactly where all the reporting requirements are there. The Regulations are of general application, so they apply nonetheless. It's more for sort of convenience and ease of reference, but I think that will sort of clarify the range of reporting requirements that we have in place at the CNSC.

THE PRESIDENT: I would hope that when you do this review you would also figure out the overlap with proactive disclosure, okay. There is definitely a misunderstanding and you know my view about lack of clarity between licensee and regulator is not something that -- we have been working very hard to try to avoid that. I still detect that there was a lack of clarity here on both sides between what proactive disclosure is and what does it mean

and regulatory requirement.

You know, to me, the proactive disclosure is a larger set, it includes all the regulatory requirements but it is bigger than regulatory requirements. Somewhere along the line you have to find a way of articulating it in such a way that there is no misunderstanding. I think there is now some misunderstanding of what it all means.

Anyhow, we have to move on. Ms Velshi...?

MEMBER VELSHI: A question for staff. I want to further explore the interface between the CNSC and the U.S. NRC. So when you became aware of it, you let the U.S. NRC know. Presumably NAC had already told them, I'm not sure. And as I read your report, it is, well, we will see what their assessment is and then we decide what the implications on us are. Is it passive as described here or do you actually have a dialogue in making sure that there is a common understanding brought forward between the two regulators?

MR. MOSES: Colin Moses for the record.

It's not passive. And just to clarify, when we did notify the U.S. NRC, it was the first that they had heard of that and they followed up with NAC subsequently to clarify again their reporting requirements around this.

NAC submitted their assessment report to the U.S. NRC, which is required through their Regulations, and also that was submitted to the CNSC. The CNSC has done an initial review and concurs with the findings around the integrity of the package and the probable cause of the weld failures, but with that said, we are also collaborating with the U.S. NRC to ensure that our regulatory reviews, given that they relate to the same event, are aligned.

MEMBER VELSHI: Very good. Thank you.

THE PRESIDENT: It's very unfortunate the same NAC that is supposedly the designer of the container supposedly will get the highly enriched uranium liquid over there. What was their explanation? How did they allow such a thing to happen here?

MR. JAMMAL: We have an NAC representative in the room.

THE PRESIDENT: Well, it's good.

MR. ADAMS: Yes, good morning. I'm James Adams, Senior Vice President for NAC International, for the record.

Our explanation is this is a failure of our quality assurance program to fully implement the surveillance of our vendors in the fabrication of these Category A quality parts. I don't know exactly how that happened, except to say that these caddies were fabricated

some time ago and they were designed properly in accordance with the codes that we used. They were specified to be fabricated under certain codes and inspected under certain codes, and we used a quality vendor, quality-approved vendor whose quality assurance program is also reviewed and approved by the U.S. NRC, same as ours is. So using all of those programmatic procedures in place, these products were created, inspected, shipped and put into use, and we had a failure.

THE PRESIDENT: So when CNL receives the material, do they do a further scrutiny on the procurement side, you know, their quality assurance to make sure that the specs are good?

MR. PILKINGTON: It's Bill Pilkington for the record.

The only incoming inspection which was done on receipt of the caddies was a visual inspection to ensure that there was no damage during shipment. So there was not a detailed examination done on receipt.

Secondly, when the caddies are removed to be put in service, to be loaded, they are inspected for any indication that damage has occurred to them at any time up to arriving at the NRU rod bay, but that again is a visual examination for unexpected damage, not to identify whether they meet the specification.

THE PRESIDENT: So the fractures that were detected could not be detected by visual observation?

MS HOBBES: This is Tammy Hobbes for the record.

The caddy itself is inspected by the operators in the field prior to use, and on any of the caddies there were no visual indications of the crack. Following the failure on the 28th, when we went back in on November 3rd and did a visual inspection of loaded caddies, we could visually see two with cracks.

THE PRESIDENT: Okay. Well, I guess we will wait for the final root cause. I assume that there are some lessons learned and it's going to be all articulated in the next report in April? Is that my understanding?

MR. MOSES: Colin Moses for the record.

Yes, that's correct.

THE PRESIDENT: Okay. So thank you. Thank you for this presentation.

THE PRESIDENT: The next item is a confidential report regarding an incident at Canadian Nuclear Laboratories during a security-related training exercise. So we will now close the session to discuss this matter in the back room here, as described in CMD 16-M9.

So we will take a 10-minute break and then

we will be back at 12:00. We will try to go for 12:00. We will try to do this quickly. Thank you.

--- Upon recessing at 11:22 a.m. /
Suspension à 11 h 22

CMD 16-M9

DISCUSSION IN CLOSED SESSION

[The Event Initial Report CMD 16-M9 contains classified information and is not publicly available]

--- Upon resuming at 12:00 p.m. /
Reprise à 12 h 00

CMD 16-M6/16-M6.A

Oral presentation by CNSC staff

THE PRESIDENT: Okay, we are back.

Now, the next item on the agenda is an information item to provide us with an update on the non-radioactive release at the decommissioned Deloro mine site, as outlined in CMDs 16-M6 and 16-M6.A.

We have representatives from the Ministry of Environment and Climate Change of Ontario and I will now turn to the CNSC staff to make their presentation.

Dr. Newland, I understand you are going to make it. Over to you.

DR. NEWLAND: Good morning again. For the record, my name is Dr. David Newland. I am the Director General of the Directorate of Nuclear Cycle and Facilities Regulation.

With me today Ms Karine Glenn, Director of the Wastes and Decommissioning Division and Ms Dana Pandolfi, an inspector within the same division.

CNSC specialists and staff from the Ontario Ministry of Environment and Climate Change are also present today to respond to any questions that you may have.

We are here today to provide you with an update regarding an unplanned release of non-radioactive construction wastewater to Young's Creek that occurred at the Deloro closed mine site in the spring of 2015. This was reported previously to the Commission at the public meeting on June the 17th, 2015.

CNSC issued a licence for the Deloro closed mine site to the Ontario Ministry of Environment, now known as the Ontario Ministry of Environment and Climate Change, or MOECC, in December 2009 with an expiry date of December 31, 2016.

The Deloro closed mine site is a legacy

site located adjacent to the village of Deloro, approximately 200 km southwest of Ottawa, near the town of Madoc. The licensed area of the site shown by the orange lines on the aerial photograph on the slide is bounded to the south by Highway 7, visible at the bottom of the photograph. This aerial photo is oriented on the points of the compass with north at the top of the photo.

The Young's Creek Area project is shown as the smaller box within the Deloro site boundary. The Moira River can be seen running down the centre of the photograph. Young's Creek joins the Moira River a short distance south of Highway 7. The area shown in yellow below Highway 7 is not part of the licensed site.

The Deloro Mine began operation as an underground gold mine in the 1860s and the historical mining, refining, and manufacturing operation closed in 1961. The environmental legacy at the site includes contamination of soil, sediments, groundwater and surface waters with arsenic, cobalt, copper, nickel, and low-level radioactive wastes that have resulted in environmental impacts both on and off the site.

As part of the Deloro clean-up, sediment in Young's Creek, contaminated mostly with non-radioactive arsenic, cobalt, copper and nickel, will be excavated and placed into an engineered waste containment facility.

This slide shows the layout of the Young's Creek Area in the spring of 2015. At the bottom of the photo, you can see Highway 7 which bounds the site. The red lines represent the locations of aqua barriers which are large tubes filled with water used to delineate the work zones. The black lines represent barriers constructed with rocks. The light blue line depicts the direction of the flow of water.

I would like to note that this photo also appears in the CMD but that the rock barriers shown here in black were not visible in the printed version of the CMD.

I will now pass the presentation to Ms Glenn.

MS GLENN: Thank you. Good morning. Je m'appelle Karine Glenn, et je suis la directrice de la Division des déchets et du déclassement à la Commission canadienne de sûreté nucléaire.

On April 30, 2015, MOECC notified the CNSC of an unplanned release of construction-related wastewater to Young's Creek, due to the collapse of an aqua barrier that occurred on April 29, 2015. The wastewater released during this event was non-radioactive, but contained arsenic, cobalt, copper and nickel. Young's Creek flows into the Moira River and there are no drinking water intakes in the Moira River downstream from the Deloro site.

On May 1, 2015, MOECC notified the CNSC of another unplanned release due to the collapse of an -- pardon me -- caused during the installation of a new aqua barrier.

Between May 1 and May 5, 2015, MOECC deployed a series of erosion control measures including sandbags, two additional aqua barriers and silt curtains. MOECC reported that the release which began on April 29th was contained on May 5, 2015.

MOECC notified downstream users of these releases and reported them to the CNSC and to the Ontario Spills Action Centre.

On May 28, 2015, CNSC staff visited the Deloro site in order to gather additional information about the releases. As a result of the observations made and information gathered, CNSC staff increased regulatory oversight of the Deloro project and on June 3, 2015, a CNSC Designated Officer issued MOECC an Order.

Upon becoming aware of the first release, MOECC immediately began taking water samples and this sampling continued after containment was restored.

CNSC staff reviewed analytical results from those samples and, at the June 17, 2015 public meeting of the Commission, concluded that no environmental impact was likely to have resulted from the releases.

The June 3rd CNSC Designated Officer Order issued to MOECC directed them to:

- cease any remediation activities that could increase environmental risk from cleanup work at the Young's Creek Area project;

- immediately develop and implement a contingency plan to deal with the exigent circumstances at the site and submit this plan to the CNSC within 30 days;

- prepare a project contingency plan for submission within 60 days;

- submit documentation on licensee oversight of the project within 90 days;

- and prepare a winter and spring management plan to be submitted to the CNSC within 120 days.

The Order required CNSC staff acceptance of the last three documents.

MOECC did not request an opportunity to be heard with respect to the Order and the Commission, pursuant to subsection 37(6) of the *NSCA*, confirmed the Designated Officer Order issued to the MOECC, in an abridged hearing on June 30, 2015.

On June 4th, 2015, MOECC advised CNSC staff that they had ceased remediation activities at Young's Creek that could increase environmental risk.

Furthermore, they had developed and were implementing a contingency plan to address the immediate exigent circumstances as per the condition of the Order.

CNSC staff consider that with these actions MOECC has met the first two conditions of the Order.

Following the event, water levels remained high and MOECC, in consultation with CNSC staff, took necessary measures, including planned releases to the Moira to prevent additional failures of the aqua barriers. CNSC staff requested additional sampling at an increased frequency.

MOECC provided daily status updates to CNSC staff, including monitoring results, between June 9th and July 16th of 2015.

CNSC staff reviewed these results and concluded that no increase in offsite contamination resulted from the releases.

MOECC held a public meeting in the village of Deloro on June 24th, 2015, in order to provide stakeholders with information on the releases. CNSC staff attended the meeting as observers and are satisfied that MOECC took adequate actions to inform the public of the situation.

Since June MOECC has instituted several

improvements to safety at the Young's Creek Area including:

- set up of the water treatment plant;

- completion of the filtrate management pond as shown in this photo;

- improvements to the aqua barrier inspection program;

- implementation of erosion control measures;

- improved communications between the MOECC and their contractors;

-installation of a berm around the slurry and the water tanks;

- and deflation of the aqua barriers restoring the natural flow to Young’s Creek.

Five inspections of the Young's Creek Area were conducted by CNSC staff subsequent to the event. These inspections were conducted to assess the status of the site and to evaluate the licensees compliance with the Order, the *NSCA*, and *Regulations* made pursuant to the *Act* and their licence.

The purpose of the June 11th and June 25th inspections was to follow up on the Order and the immediate actions taken by the licensee to comply with the conditions of the Order.

The September 28th inspection which was

jointly conducted with staff from Environment Canada, also focused on the Order.

CNSC staff took water and soil samples during the June 25th and the Sept 28th inspections. Results from theses samples confirmed that no increase in offsite contamination resulted from the releases which occurred from April 29th to May 5th.

The October 21st inspection emphasized the verification of geo-environmental aspects of the Industrial Mine Area Waste Containment Area, the Tailings Management Area, the Young's Creek Area Waste Containment Facility, and the water treatment facilities associated with the Young's Creek Area.

Finally, the November inspection was performed as part of the annual compliance verification of the Deloro site and to verify that the site would enter the winter in a safe state.

As a result of those inspections, CNSC inspectors issued MOECC seven action notices and four recommendations.

The safety control areas which resulted in compliance notices were operating performance, human performance, radiation protection, conventional health and safety and waste management. All these compliance notices were associated with program issues of low-risk

significance and CNSC staff consider that all but one are closed.

The one action notice that remains open pertains to human performance. This finding is also covered by a condition of the Order. This action notice will be closed once all the conditions of the Order have been met.

Following the inspection conducted November 24-25, 2015, CNSC staff concluded that the Young's Creek Area is in a safe condition for the winter.

In response to the Order, MOECC submitted several documents to CNSC staff for review including:

- A contingency plan to deal with the immediate exigent circumstances;

- A project contingency plan for the Young's Creek Area;

- An oversight plan to detail MOECC's oversight of the Young's Creek Area remediation, and;

- A winter and spring management plan.

All submissions met the timelines specified in the Order.

CNSC staff reviewed MOECC's submissions and requested that MOECC provide further details on the spring management component of the plan. In addition, CNSC staff have also requested that MOECC provide additional

information on monitoring and licensee oversight of the Young's Creek Area for CNSC staff review and acceptance.

I will now pass the presentation back to Dr. Newland.

MR. NEWLAND: CNSC staff conclude that site is in a safe condition for the winter; additional information is required to demonstrate safe resumption of activities in the spring; the Order will remain in place until CNSC staff have reviewed and accepted this information and all conditions of the Order have been met.

This concludes staff's presentation and we are available to respond to any questions that the Commission Members may have. Thank you.

THE PRESIDENT: Thank you.

Before that, I understand that Ms Kew would like to make a statement.

MS KEW: President Binder, Members of the Commission, for the record, my name is Hollee Kew. I am the Director for Eastern Region Operations Division, Ontario Ministry of the Environment and Climate Change.

With me today are Trevor Dagilis, the Assistant Director of Eastern Region; Katharine Faaren, the Manager of the Deloro project; and Kara Smith, Engineer on the Deloro project.

Thank you for the opportunity to provide

remarks. We are here today to respond to the update provided to you by CNSC staff with regards to the ministry's actions following the non-radioactive discharges of construction-related wastewater and stormwater from the Young's Creek area of the Deloro mine site on April 29th and May 1st, 2015, and of course to answer any questions that you may have of us.

Trevor and Katharine will highlight some of the specific details of our actions in response to the discharges and to the CNSC Order.

I want to assure you, as I have in the past, that the Ontario Ministry of the Environment and Climate Change takes the Order from the CNSC very seriously. We have made our response to the Order a top priority, and have responded to every request from the CNSC staff in a timely manner. Following the unplanned discharges in April and May, the ministry has taken extensive measures to deal with the situation, and also to do an analysis of what caused the breach of the temporary aqua barriers, and to improve our processes to make sure we are remediating the site in a way that is the most protective of the environment.

We have also added additional staff and several safety measures to ensure good, effective and timely program oversight.

We are pleased with the findings of the CNSC status update and that they conclude that the
Ministry of the Environment and Climate Change is complying with the conditions and timelines of the Order.

We are also pleased that the CNSC staff have reviewed and confirmed the ministry's sampling results which found "no increase to the offsite contamination results from the releases that took place from April 29th to May 5th, 2015."
And we are also pleased that the CNSC staff concur with the ministry in finding that the Young's Creek Area of the site is in a safe condition for the winter.

We do note from the status update on page 7 that CNSC staff were seeking further
details to support our winter and spring management plan and they do require additional information on the oversight of the Young's Creek Area. My staff have recently submitted these details for CNSC staff review.

I want to assure you that the ministry will continue to work with CNSC staff to satisfy these requirements of the Order. We are hopeful that we are close to staff acceptance of
all of our submissions and closure of this Order.

I will now ask Trevor Dagilis, Eastern Region Assistant Director, and Katharine Faaren, the Deloro

Project Manager to provide some additional information on the ministry's
detailed response to the Order.

MR. DAGILIS: Thank you, Hollee, and thank you to the Commission for the opportunity to speak.

My name is Trevor Dagilis, for the record. I'm the Assistant Director of Eastern Region of the Ministry of the Environment and Climate Change.

As the CNSC staff mentioned, the incidents in April and May 2015 began with an unplanned release of water from behind a temporary barrier. This aqua barrier was installed to provide secondary containment for sediment that had been moved within the creek during the 2014 construction season. The sediment was moved to allow for the construction of the containment cell for long-term storage of the sediment.

The water that was released was rainwater and groundwater which had been in contact with the contaminated sediment. The water contained concentrations of metals in keeping with the historical concentrations found in water in the Young's Creek area. Radionuclides were well below the Health Canada Guidelines for Drinking Water Quality.

I want to take this opportunity to provide some additional information about the ministry's response

to the unplanned discharges and our response to the CNSC Order.

Once the release of impounded water occurred the ministry put in place additional erosion and sediment control measures.

The ministry augmented the routine surface water sampling program by increasing sample collection downstream for metals. In addition we collected 73 samples for radionuclides and 44 samples for toxicity.

Our analyses and extensive testing found that there was no environmental impact as a result of the release of the water.

When we investigated, we found there was a number of circumstances that, when combined, led to the failure of the barrier.

We've taken the necessary steps to ensure this doesn't happen again.

We have improved and enhanced communication protocols between the contractor, the contract administrator, and the ministry's Deloro team. We have completed a lessons learned analysis. The ministry immediately enhanced our protocol and process for inspection of aqua barriers and information sharing. With this new protocol in place the ministry can be assured that we are made aware of issues immediately, and that we can

ensure appropriate action is taken quickly.

I would also like to note that this new protocol is an enhancement to the existing protocols we had in place for communication with the contractor and contract administrator. Of course, this enhanced oversight applies beyond aqua barriers. We conducted a detailed assessment of risk, and we will continue to update this risk assessment on an ongoing basis.

Also, the ministry recently hired a compliance officer to work with the Deloro project team as part of that team, to proactively scrutinize the project to identify any possible gaps or issues so they can be addressed immediately.

In addition to our enhanced inspection and communication protocol, the ministry ensured the contractor completed a number of additional measures that were part of our planned and approved engineering design. These additional measures were part of the water management plan at Young's Creek. We now have two water storage features and a slurry storage tank in the Young's Creek area to help manage construction water.

We have installed a secondary containment berm around the slurry and water tanks to ensure that if there is a spill from those tanks, the spill will be contained.

In June 2015 we put in place a filtrate treatment system, which treats construction-related water. This system must be operational before the ministry will allow the contractor to remove any additional sediment from the creek.

I would now like to summarize the ministry's response to the CNSC Order. Once the ministry received the Order we immediately began work to fulfill its requirements in the timelines required.

Specifically, the ministry immediately stopped all remediation activities in Young's Creek.

We developed a contingency plan to deal with the immediate circumstances to control the unplanned discharges. We implemented those measures on June 4th.

We prepared and submitted a written water management plan to CNSC staff.

We prepared and submitted a Risk Review and Remediation Contingency Plan to the CNSC.

We prepared and submitted a plan that details the Ministry's oversight for the project, and we prepared and submitted a winter and spring management plan.

We will continue to work with the CNSC staff to ensure we provide all additional information they require. With careful sediment and erosion control, the Ministry has successfully returned Young's Creek to its

natural state and ensured that the previously-disturbed contaminated sediments will remain secure.

As Ministry staff have noted and CNSC staff have concurred, no environmental impact was likely to have resulted from the release of water from behind the secondary containment barrier.

The most recent CNSC inspection report notes that the site is being maintained in a safe condition as required by the *Nuclear Safety and Control Act* and the licence.

The Ministry continues to keep the public and our stakeholders informed through our regular public liaison committee meetings.

We hosted meetings in Deloro in June and December, and we are planning for another meeting this spring.

We are also planning to provide another update newsletter to the community this spring.

I would now like to ask Kate Faaren to provide some more details on the site remediation.

MS FAAREN: Thank you, Trevor.

My name is Katharine Faaren, for the record. I am the Deloro manager with the Ministry of Environment and Climate Change.

I am pleased to say that the final

remediation for the Deloro mine site clean-up project is now 75 percent complete, and it is targeted for completion in 2018.

The Ministry has spent nearly $60 million since 2010 in our remediation efforts, and a total of $100 million on the project since the Ministry began its involvement in 1979 as the remediator of last resort.

The tailings area remediation was completed in 2013. The tailings area was covered with an engineer cover.

I'm happy to report that contaminated materials are no longer spreading from this area into Young's Creek.

In the industrial and mine area, the remediation work to date has created a significant environmental improvement. More than 95 percent of the most highly-contaminated soil in this area has been excavated and placed into the waste consolidation area.

In 2015, the contractor completed the removal of highly-contaminated soil from part of the Moira riverbank on site and rebuilt that riverbank with clean material.

We expect this extensive clean-up to recreate a significant improvement in the long term water quality of the Moira River.

We are building a groundwater interceptor trench along the western side of the site throughout this winter. This trench will divert clean groundwater away from the contamination.

The Ministry's contractors will build an engineered cover over the waste consolidation area starting this year. All work in this area will be finished by early 2017. That means the most highly-contaminated area of the site will be contained and secure within the next year to year and a half.

The remediation on the Young's Creek area will be the last aspect of the project to be finished. We are targeting completion of that work by 2018.

The primary contaminant across the site and in the Young's Creek area is arsenic. Technical assessments continue to demonstrate that, for the Young's Creek area, the risk associated with contaminated sediment movement beyond the clean-up area is low.

It is important to note that this water does not contain radionuclides above the Health Canada drinking water guidelines.

However, until the contaminated sediment in the creek is removed, the arsenic levels in the creek water will continue to exceed the provincial water quality objectives. Therefore, it is important to finish our

remediation work in this area so we can once and for all eliminate the potential for the contamination to spread into the environment.

There is currently no work ongoing in the Young's Creek area due to winter shutdown. Prior to winter shutdown, the construction in this area was approximately 30 percent complete.

I believe we have effective oversight of this project currently in place, and I want to echo Hollee's comments in saying that we look forward to continuing the important remediation work in the Young's Creek area this spring.

Thank you.

THE PRESIDENT: Okay. Thank you.

Let's jump into the question session, starting with Mr. Tolgyesi.

MEMBER TOLGYESI: Merci, Monsieur le président.

The Moira Creek's flowing south? Okay.

Now, on page 7 of the staff's CMD, at the top they are saying that Minister for Environment has instituted several safety improvements.

Are these safety improvements or process improvements? Because you are talking about water treatment plant, filtrate management, et cetera. They are

really process improvements.

MS FAAREN: Kate Farren for the Ministry of Environment and Climate Change.

I would say that they are a combination of both.

Installing a berm around the two tanks I would definitely consider a safety improvement.

I would also say that the addition of some erosion and sedimentation control measures as a contingency measure is also a safety improvement.

Bringing forward the water treatment system ahead of when it's needed to treat the slurry is a safety improvement and also a process improvement.

MEMBER TOLGYESI: So the slurry is coming from where? And it's going -- it's processed by the water treatment plant?

How it works? Where it's located?

MS SMITH: Kara Smith, for the record.

Sediment is planned to be excavated in a dry state from Young's Creek. The sediment will then be processed into a slurry, which will be pumped into a series of what are called geo tubes, which are tubes that will be laid down at the containment cell for the storage of the sediment within the landfill.

So the sediment will be processed into a

slurry to allow it to be pumped into those geo tubes.

MEMBER TOLGYESI: And your water treatment plant, where it's located?

MS SMITH: Kara Smith, for the record.

The filtrate treatment system is intended to treat the filtrate that comes out of the geo tubes as the geo tubes dewater, so that water that was added in to create the slurry will come out of the geo tubes. That's what will go into the filtrate treatment system.

It is also there to treat accumulated water within a construction zone.

MEMBER TOLGYESI: And now all these improvements are in place, do you measure -- what is the performance, it's improving, is the discharge is contaminants are less? Because you did all this, so what's the performance of the system?

MS SMITH: Kara Smith, for the record.

The filtrate treatment unit was operated this summer to manage some water levels behind aqua barriers. The water levels were above what are called the discharge criteria and the environmental compliance approval, so we have an approval issued by the province for that system.

We are not permitted to discharge any water that does not meet those discharge requirements, so I

believe the concentrations of arsenic were around perhaps .3 and they were reduced to below .1 milligram per litre in accordance with the environmental compliance approval.

MEMBER TOLGYESI: Because you were saying that you expect to reduce historical releases to at least 90 percent of historical releases, so what are those historical releases and where you are now?

MS FAAREN: I was speaking broadly -- sorry. Kate Faaren, for the record.

I was speaking broadly to the overall remediation, which includes the remediation of the industrial and mine area as well as the remediation of Young's Creek.

The primary component of the Young's Creek remediation that will make the most difference is actually taking the sediment out of the creek and, as Kara explained, putting it into the geo tubes.

That work has not yet started because the base of the containment cell has not yet been completed.

THE PRESIDENT: Mr. Harvey?

MEMBER HARVEY: Just one quick question to the staff.

You have received and I think you mentioned the -- all the details and the required information, so when did you receive that and how long will

it be for you to study that and say okay or not okay? I mean the supplementary information.

MS GLENN: Karine Glenn, for the record.

We received the latest version of the information that we requested on January 12th.

CNSC staff have performed a review of that, and we are actually meeting with the MOECC later on today to discuss our comments face to face and hope to resolve that in the shortest order.

I would like to state that CNSC staff is also working very diligently in order to ensure that we provide responses to the MOECC in a very tight time lines in order to move them towards, if possible, full compliance with the order and the closure of the order.

MS KEW: President Binder, for the record, Hollee Kew.

This is actually public record on our web site. I think it's -- this is a really tremendous Ontario success story. Even on our web site, we -- before the plant, the arsenic treatment plant, started in 1983, about 52 kilograms of arsenic was going into the Moira River daily.

In 2012, the plant stopped about five tonnes of arsenic going into Moira River per day, so that's based on 2012.

I think that kind of gets to the question about, even in the Moira River, it's down by 80 percent, the arsenic that's going to the river on a daily basis, so it's a tremendous accomplishment for the Province of Ontario how much arsenic's been removed going into the Moira River based on our -- and Kate, you could probably expand on that.

MS FAAREN: Absolutely. The current concentrations going to the Moira River, most of the year, would meet the provincial water quality objectives. Unfortunately, it is not all the year. That is why we are continuing remediation.

But we can certainly say we have seen a huge increase from our remediation efforts prior to 2010, and since.

THE PRESIDENT: I think the one thing that I caught here, which was really good news, is that all of this work will be finished by 2018, and which I guess everybody can celebrate this achievement.

And is that the time where CNSC stop managing this and institutional control goes into the Ontario government, or thereabouts?

Staff, remind me again what's the end game here?

DR. NEWLAND: Dave Newland, for the

record.

So the end game is that once the site has been remediated and clean, it does, indeed, move into institutional control under the provincial government.

THE PRESIDENT: So I'm sure you'll be happy to get us off your back.

MS GLENN: Karine Glenn, for the record.

If I could just add that once the remediation is completed, there is a period of monitoring that is necessary in order to demonstrate that the objectives have been met. And then, once the site is stable and the objectives of the environmental assessments have been met, then that is the point where movement to institutional control would then be considered.

And that long-term monitoring would continue after movement into the institutional control program.

THE PRESIDENT: Okay. Thank you.

Dr. McEwan.

MEMBER McEWAN: So I think one thing that struck me about the CMD was the absence of data, and it was very nice to hear of the reduction in arsenic. It would have been nice to have seen a little table just providing what had changed.

You said you'd tested for radio nuclides

and they were fine. What radionuclides, and by what definitions were they fine?

MS SMITH: Kara Smith, for the record.

The radionuclides that were analyzed include radium-226, thorium-230, uranium-234, uranium-238. And they were at least an order of magnitude below the Health Canada guideline for drinking water quality.

MEMBER McEWAN: Okay. So that would have been nice to have seen in the report, I think, to actually know the numbers and to see that validated.

THE PRESIDENT: I know that you're waiting for a question here.

Did we do independent monitoring of this?

MS GLENN: Karine Glenn, for the record.

We did take -- CNSC staff took samples, both water and soil samples, during two of the inspections. And I will pass the question over to our environmental specialist, who will expand on our monitoring.

MS FRANCIS: Kiza Francis, for the record. I'm the Director of the Environmental Compliance and Laboratory Services Division.

My environmental compliance staff did take samples during compliance inspections. For the 2016 independent environmental monitoring program campaign, Deloro will be included and, therefore, the results from

that campaign will be available on our web site for the public and we will be looking at the results we took during the compliance inspection and the independent environmental monitoring sampling that will happen in 2016.

THE PRESIDENT: Why is it not available now if you already have done it?

MS FRANCIS: We have the compliance samples that we've taken, but we haven't done the independent environmental monitoring program, which is a bigger program than the targeted samples done for the compliance, like during the compliance inspection.

So the IEMP --

THE PRESIDENT: But the compliance data itself does not necessarily go on, you know, so you can click on the map and see some of the results?

MS FRANCIS: The map that you see online is always from our independent sampling done that's on publicly-accessible areas, and those aren't taken during compliance inspections, so those are always the IEMP samples that are online.

Our inspectors take compliance samples during inspections routinely, but it's the IEMP samples that are shown online because those are the publicly-accessible areas. So that's what the public -- that's what we deem the public would be interested in. But those

compliance samples are available as well.

THE PRESIDENT: I'm still confused. Are the compliance -- the inspection data, is that posted or not?

MS FRANCIS: Kiza Francis, for the record.

We do not routinely post compliance inspection data on our web site.

THE PRESIDENT: Why not? They're an independent measurement, are they not?

I guess you should think about that.

Ms Velshi.

MEMBER VELSHI: Thank you.

With the MOECC being usually a regulator in charge of the execution of a project, so if -- and it's very reassuring, all the actions taken and all the proactive measures.

If an order had not been issued, would you still have done all those things anyways?

MS KEW: Hollee Kew, for the record.

Yes, we would have. Absolutely.

MEMBER VELSHI: Thank you.

Hopefully an accurate answer, too.

THE PRESIDENT: Mr. Tolgyesi.

Mr. Harvey?

Dr. McEwan:

Ms Velshi?

MEMBER VELSHI: At the public meetings that you've had, what's been the nature of concerns, if any, that have been expressed?

MS FAAREN: Kate Faaren for the Ontario Ministry of the Environment and Climate Change.

The public meetings we have the routine -- every three to four times a year, typically, the concerns are about the status of construction. They're very anxious for us to complete the construction.

We often talk about truck traffic in the area. It is a remote area, so increased truck traffic, they're interested in that.

We have made, actually, some improvements to that so that the trucks no longer go through the village of Deloro. They find that a very big safety improvement for them and for their community.

We talk about community involvement and celebrating the heritage of the site, and we also give an annual report to the public liaison committee on all of our water sampling with charts and data so they can see what the water quality is like.

MEMBER VELSHI: Thank you.

THE PRESIDENT: Anybody else?

Just last question is, when can we hear

from you again? The next milestone report, when would that be?

MS KEW: Hollee Kew, for the record.

We actually are doing preliminary data to get conditional clearance sooner than perhaps CNSC staff would be aware.

We think we actually, as the Province of Ontario, do have the ability to regulate the site on our own, and our early indicators say that we probably could do it quite soon.

Our first priority, of course, is to have this order closed.

So we would like to be up here before the Commission quite soon to indicate that data does show that there are very low levels of radioactive waste on the site and that, under provincial regulation, we do believe that we could regulate this site under provincial regulation.

So hopefully, within the next two months or three months, we could be back at the Commission with this information to show that.

THE PRESIDENT: Right now, staff, when was -- what is the planned reporting back on the Deloro project?

MS GLENN: Karine Glenn, for the record.

Obviously, once all the conditions of the

order have been met, we will prepare documentation in order to have the order closed and that being a designated officer order that would be brought to the Commission's attention.

In addition, the Waste and Decommissioning Division is preparing a regulatory oversight report for waste facilities, including the Deloro site, and the Deloro site being a former mine, if you would like, even though it was not a uranium mine, is -- will be reported on on an annual basis as long as it is part of the CNSC regulatory oversight, and as part of the regulatory oversight report for the Uranium Mines and Mills Division, which is scheduled for the fall of 2016.

THE PRESIDENT: Well, I'm just being informed that the licence itself expires in December of this year, so I think the two sides have a lot to discuss.

So thank you. Thank you for that.

We will now break and -- for lunch and come back at 1:30.

--- Upon recessing at 12:45 p.m. /
Suspension à 12 h 45
--- Upon resuming at 1:38 p.m. /
Reprise à 13 h 38

THE PRESIDENT: Sorry we're a bit late.

So the next item on the agenda is a decision item on the Regulatory Document 3.2.2 "Aboriginal Engagement" as outlined in CMD 16-M5 and 16-M5.A.

I understand that Ms Owen-Whitred will make the presentation.

Over to you.

CMD 16-M5/ 16-M5.A

Oral presentation by CNSC staff

MS OWEN-WHITRED: Bonjour Monsieur le Président, membres de la Commission.

My name is Karen Own-Whitred, Director of the Regulatory Framework Division. With me today are Clare Cattrysse, Director of the Policy, Aboriginal and International Relations Division, who will be presenting some of the document-specific slides, along with Kim Noble, Team Leader, Aboriginal Consultation and the Participant Funding Program.

Also present is Cristian Lacatus, Regulatory Framework Officer, as well as other subject-matter experts, to respond to questions as necessary.

We are here today to request that REGDOC-3.2.2, "Aboriginal Engagement," be approved for publication

and for use by CNSC staff in assessing the acceptability of licensees' aboriginal engagement activities.

Before turning the presentation to Ms Cattrysse, who will discuss the document in detail, I will briefly review where REGDOC-3.2.2 is situated within the CNSC's regulatory document framework and I will note for the Commission's attention three minor proposed edits to the document you have in front of you.

To enhance accessibility of our regulatory expectations, the CNSC structures our regulatory documents according to the framework shown here. This slide shows where REGDOC-3.2.2 fits into the CNSC's broader document framework. It is situated within Section 3.2, "Public and Aboriginal engagement." This section also includes regulatory requirements and guidance for public information and disclosure and for licensee public information programs.

I would now like to bring forth three minor edits or clarifications to be made to REGDOC-3.2.2 should this document get approved.

First, on page 3, in Section 2 of the second paragraph, the second sentence states:

> "Potential and established Aboriginal and/or treaty rights have been recognized and affirmed under section

35 of the *Constitution Act, 1982*."

The words --

THE PRESIDENT: Hold on, hold on, hold on. We are a bit slow.

--- Laughter / Rires

MS OWEN-WHITRED: Sorry. So it was --

THE PRESIDENT: So we are now talking about --

MS OWEN-WHITRED: -- page of the REGDOC.

THE PRESIDENT: Of the actual REGDOC. We've got two of them.

So it's the English version, right?

MS OWEN-WHITRED: Correct.

THE PRESIDENT: I'm still looking for it. Page 3?

MS OWEN-WHITRED: Page 3, Section 2 --

THE PRESIDENT: Right.

MS OWEN-WHITRED: -- second paragraph.

THE PRESIDENT: M'hmm.

MS OWEN-WHITRED: The second sentence --

THE PRESIDENT: Okay.

MS OWEN-WHITRED: -- reads:

"Potential and established Aboriginal and/or treaty rights have been recognized and affirmed under section

35 of the *Constitution Act, 1982*."

THE PRESIDENT: Right.

MS OWEN-WHITRED: In this context, the words "Potential and established" were used in error. It should read "Existing Aboriginal and treaty rights," and then the rest of the sentence.

THE PRESIDENT: Okay.

MS OWEN-WHITRED: Okay.

MEMBER TOLGYESI: (Off microphone)

MS OWEN-WHITRED: That's the only instance in that particular context. The term should have been "Existing."

Okay, so the second correction I would like to note is on page 5, the same document, Section 3, the second paragraph from the top of the page.

The sentence states:

> "... licensees shall submit their review to the CNSC as part of their licence application or as a project description if an environmental assessment (EA) decision is being sought prior to a licensing decision."

For clarity, we would like to add a reference to the *Canadian Environmental Assessment Act*,

2012 in this sentence, so that the sentence would read:

> "... licensees shall submit their review to the CNSC as part of their licence application or as a project description if an environmental assessment decision under *CEAA, 2012* is being sought...."

This same change would be applied on page 7, Section 4.2, bullet two within the second list. Again, that amendment would be for clarity.

Finally, staff would like to add as Appendix C to the REGDOC CNSC's policy for aboriginal consultation called "Codification of Current Practice: Canadian Nuclear Safety Commission's Commitment to Aboriginal Consultation."

It is staff's opinion that although this document is referenced throughout the REGDOC, appending the policy document to the REGDOC will add clarity and improve transparency.

So to summarize, if REGDOC-3.2.2 is approved, then the aforementioned edits would be reflected in the final published REGDOC.

I will now turn the presentation over to Ms Cattrysse.

MS CATTRYSSE: Hello, and good afternoon.

This slide, the overview slide, provides an overview of REGDOC-3.2.2's genesis and development process. I'll provide background information on the duty to consult, identify existing guidance on aboriginal consultation and engagement, discuss the current challenges, and, finally, present the objectives of the REGDOC-3.2.2.

Kimberley Noble will then describe the consultation process and its outcomes, before moving on to explain how the document, if approved, would be implemented.

We will finish with CNSC staff's conclusions and recommendation.

So first we will start by providing a bit of background on what is meant by the "Crown's duty to consult."

In 1982, section 35 of the *Constitution Act* provided that existing aboriginal and treaty rights of the Aboriginal Peoples of Canada are recognized and affirmed.

Then, in the years 2004 and 2005, the Supreme Court of Canada, in their decisions for Haida, Taku River and Mikisew Cree, held that the Crown has a duty to consult and, where appropriate, accommodate when the Crown contemplates conduct that might adversely impact *potential*

or established aboriginal and treaty rights.

Thus the Supreme Court clarified that it was essential to also consult when there are *potential* aboriginal rights that might be adversely affected versus only *existing* aboriginal and treaty rights, as stated in the Constitution.

The Supreme Court also explained that it will look at how the Crown manages its relationships with aboriginal groups and how it *conducts* itself when making these decisions that may adversely impact the rights recognized and affirmed by section 35.

In the same decisions the Supreme Court determined that the duty to consult stems from the honour of the Crown and the Crown's unique relationship with aboriginal peoples. In subsequent decisions, the court further explained that the duty to consult is a constitutional duty that invokes the honour of the Crown and that it must be met.

The various Supreme Court decisions are what we refer to as common law. The CNSC, as an agent of the Crown, ensures that licensing decisions under the *Nuclear Safety and Control Act* and the *Canadian Environmental Assessment Act, 2012* uphold the honour of the Crown.

The Supreme Court of Canada has emphasized

that the duty to consult, and where appropriate accommodate, is raised at a low threshold. Knowledge of a credible, but unproven claim suffices to raise this duty.

While the Supreme Court of Canada has stated that the Crown may delegate procedural aspects of the consultation process to third parties, CNSC is not requiring licensees to consult with aboriginal groups on the CNSC's behalf or to act as a representative of the Crown.

REGDOC-3.2.2 requires licensees to identify and engage early with the appropriate aboriginal groups whose potential or established rights may be adversely impacted by their project and it states that CNSC may use the information provided by the licensees to meet its duty to consult.

It is staff's opinion that licensees are often best placed to start early engagement with aboriginal groups and to collect important information from them. Examples of such information include the location and use of sacred sites and spiritual sites, hunting, fishing and trapping areas and practices, areas of traditional use or the collection and harvesting of cultural foods and medicines in relation to the proposed project.

CNSC will still consult with aboriginal groups whose rights may be adversely impacted by an

activity that's described in a licence application, and will do so as appropriate. The activities conducted by licensees and staff, the information collected from aboriginal groups, any proposed mitigation and accommodation measures and staff recommendations will all be presented to the Commission through our respective Commission-member documents.

This slide provides some history and context on CNSC's policy -- did we change? Yes -- CNSC's policy and guidance activities with respect to the duty to consult.

In 2008, Canada published the *Aboriginal Consultation and Accommodation Interim Guidelines for Federal Officials to Fulfill the Duty to Con*sult. These guidelines were updated in 2011 and they are being rewritten and updated again now.

In 2010, the CNSC posted on its website its Codification of Practice. CNSC's policy statement on aboriginal consultation, which we just referenced, will now be added to the REGDOC as an annex. This statement confirms the CNSC as an agent of the Crown and describes our commitment to building relationships with aboriginal communities affected by CNSC-regulated facilities and meeting any duty-to-consult obligations. It also includes a statement on the importance of licensees' engagement

activities, and how they can assist the Crown in meeting its duty to consult.

Then in the year 2011, CNSC posted on its website guidance material titled, "Supplementary Information for Licensees: Aboriginal Consultation." This document served as guidance to our codification of practice on aboriginal consultation. This document encouraged licensees to engage with potentially affected aboriginal groups early, to develop long-term, meaningful relationships with these communities and identified how the CNSC could use this information and any proposed mitigation or accommodation measures in meeting its duty to consult.

Then in the year June 2015, Indigenous and Northern Affairs Canada posted on the behalf of the Government of Canada "Draft Consultation and Accommodation Advice for Proponents." REGDOC-3.2.2 is aligned with this draft guidance. What makes this regulatory document different from the existing guidance is that it includes five requirements, as well as ample guidance on how to meet those requirements.

So the issue arises: Why make a REGDOC when so much guidance exists?

Staff found that although high-level guidance was available on the CNSC's website, the goals of having early communication with licensees before

applications were received and to receive information on their engagement activities early in the review process were not being achieved regularly or in a consistent manner.

As well, the CNSC staff wanted to make it clear the roles and its expectations of licensees regarding their engagement activities and how this would support the CNSC in meeting its duty consult when it was raised.

It was also important to reflect how aboriginal engagement practices have evolved and to encourage meaningful long-term relationships. It's of the CNSC's view that the requirements in REGDOC-3.2.2 will allow staff to conduct more effective and efficient aboriginal consultation processes for licence applications.

This slide outlines the objective to be met by creating REGDOC-3.2.2.

By moving from providing licensees with guidance only to developing a REGDOC with requirements and guidance, staff are of the opinion that the objective of an effective and efficient engagement process can be achieved by early engagement with aboriginal communities, early communication between a licensee and CNSC staff and the development of meaningful relationships with affected aboriginal communities.

The REGDOC codifies current expectations

and reduces the risk of delays in the regulatory review process.

I will now go over the five new requirements in the REGDOC.

Number one: licensees are first required to determine if their licence application will be subject to this REGDOC. This review and determination needs to be submitted to CNSC staff. Licensees are strongly encouraged to provide this information to staff as early as possible, preferably in the early discussions with CNSC staff.

For example, licensees are asked to consider if their activity, as will be described in the licence application, can cause impacts to the environment and could adversely impact aboriginal or treaty rights, such as the ability to hunt, trap, fish and conduct cultural ceremonies. If the review identifies any such impacts, then the REGDOC applies.

Number two: if the REGDOC applies to a licence application, the licensee will have to identify which aboriginal groups to engage and what level of engagement activities should be conducted early in the project planning phase. The greater potential of adverse impacts to rights, the more comprehensive engagement activities will need to be conducted.

Number three: in its aboriginal

engagement report, licensees are expected to provide a list of the identified aboriginal groups, the methodology used to identify them, a summary of engagement activities that have been conducted to date, a plan for future engagement and a list of mitigation and/or accommodation measures that have been proposed to date, if any.

This report is to be submitted with the licence application or a project description if there is an environmental decision under the *CEAA, 2012*; however, licensees are strongly encouraged to provide a copy of the report to staff prior to submitting either a licence application or project description so staff can review this material as early as possible.

Fourth: an engagement plan can change throughout the review process, so to address new information attained or confirmed this can include aboriginal groups being added or removed from the list, new mitigation measures, proposed changes to the project. The CNSC needs to be informed of such changes; therefore, licensees are required to submit an updated aboriginal engagement report during the review. The timing of this report is to be proposed by the licensee in the original report and can be aligned with the length of the review process.

Finally, in their commission-member

documents seeking a licence or EA approval, the licensee will be required to include a summary of their aboriginal engagement activities, including any mitigation or accommodation measures being proposed, thus it is of the staff's opinion that the fulfilment of the new requirements will assist the Commission in making a determination of the duty to consult being raised by a proposal, and if so was it met based on the information provided in Commission-member documents during the Commission proceedings.

Staff is of the opinion that REGDOC-3.2.2 clearly identifies its requirements and expectations of licensees and how their engagement activities and information will assist the CNSC in meeting its duty to consult when raised.

Unlike the existing guidance information, this REGDOC also includes ample guidance, resources, including numerous lists on how the requirements can be fulfilled, while also giving a licensee the freedom to create an aboriginal engagement plan that works for them and the potentially affected aboriginal communities.

Those resources include Canada's ATRIS, which is the Aboriginal and Treaty Rights Information System that's maintained by Indigenous and Northern Affairs Canada. This publicly accessible database can help licensees identify aboriginal groups within the vicinity of

their project and includes information that is related to potential or established aboriginal and treaty rights.

REGDOC-3.2.2 also promotes best practices, including early identification and the involvement of potentially affected groups, the development of a long-term relationship and consideration of offering capacity to aboriginal groups that are participating in the review.

The REGDOC is also flexible with timing, and that CNSC strongly encourages licensees to provide prior to submitting an application to promote early communication and allow for better alignment in our aboriginal engagement consultation plans.

The REGDOC also identifies that if the relevant information already exists or is best placed in an existing report, such as a public information disclosure report or an environmental assessment report, staff can be just directed to these reports. This will reduce the duplication of work.

I'll now turn the remainder of the presentation over to Kimberley Noble to explain the consultation process undertaken on the REGDOC and CNSC's proposed implementation of this document.

MS NOBLE: Good afternoon.

While most REGDOCs provide 60 days for consultation, 120 days was provided for REGDOC-3.2.2. The

decision to provide additional time was based on pervious feedback received from aboriginal groups requesting more time to review documents and submit comments.

REGDOC-3.2.2 was sent to all subscribers in the CNSC's info email account. Additionally, copies were sent directly to 29 aboriginal communities and organizations, including the Assembly of First Nations, Métis National Council and Inuit Tapiriit Kanatami.

The consultation process also included 17 additional days to allow for feedback to be submitted on the comments received during the 120 days.

Participant funding was offered upon request. Staff received three applications, and up to $2,000 was awarded to Black Lake First Nation, Hatchet Lake First Nation and Fond du Lac First Nation to review the document and to provide comments.

In total, staff received 17 submissions and dispositioned 200 comments. Numerous revisions were made based on the comments received, and the revised REGDOC was emailed to all commenters.

The respondents identified a number of key areas in their submissions, such as clarification needed on the CNSC's roles and responsibilities, the difference between engagement and consultation, factors that raise the duty to consult and how to determine scope, and the lack of

reference to capacity for aboriginal groups.

A number of licensees were also concerned about the additional workload and the need to respect sensitive information. The following slides outline CNSC staff's responses to these submissions.

While REGDOC-3.2.2 is focused on requirements and guidance for licensees, revisions were made to clearly state that the duty to consult rests with the Crown and that the CNSC is not attempting to delegate this responsibility through this REGDOC.

Also, text was added to the preface stating that the term "engagement" refers to licensees' activities with aboriginal groups and the term "consultation" refers to activities undertaken by the CNSC to fulfil its duty to consult, and, where appropriate, accommodate.

Comments included the need for greater clarity around scope of the document and that REGDOC 3.2.2 is duplicating engagement activity requirements already found in RD/GD-99.3 Public Information and Disclosure. To address these concerns, text was added to the document’s background section to clarify the duty to consult, including the test provided by the Supreme Court of Canada to determine when the Crown's duty to consult is raised. The three factors are: contemplated Crown conduct,

potential adverse impact, and potential or established Aboriginal or treaty rights.

Further clarification included that the intent of REGDOC-3.2.2 was to ensure that licensees engage with potentially affected Aboriginal groups when their project may raise the Crown’s duty to consult and that the level of engagement activities should be proportionate to the level of potential adverse impact to a right. This is often referred to as the consultation spectrum and an example is included in section 2 of the REGDOC. To be helpful, a list of examples of activities that do not raise the duty to consult was revised to provide greater clarity.

Finally, while the CNSC cannot require a licensee to submit information prior to their licence application, text was added throughout the REGDOC to encourage licensees to speak with CNSC staff as early as possible to ask questions and to seek feedback on their engagement plans.

The REGDOC was revised to encourage licensees to consider providing capacity to Aboriginal groups being engaged. Capacity can include providing appropriate amount of time needed for reviews, technical expertise, translation services or financial resources, which can include providing some of the information in a community's language, covering the costs of meetings or

honoraria fees for elders' participation. This is aligned with Canada's draft guidance for proponents and is considered a best practice.

We would also like to add that CNSC's participant funding program is also available to support Aboriginal groups to participate in CNSC's regulatory review processes.

Staff is of the opinion that the requirements set out in REGDOC-3.2.2 will not add a significant regulatory burden to licensees as many existing licensees already do much of this work. The change will be that licensees will now have to share the information with CNSC staff earlier in the process. However, the reporting mechanisms have been made to be flexible, meaning that if the required information is being shared in an existing report, staff can be directed to it. For example, for major environmental assessments conducted under the CEAA 2012, licensees often include a chapter on public and Aboriginal engagement activities in their Environmental Impact Report. Such information could suffice as a material update report. This is where it would be important for the licensee to speak with CNSC staff for guidance and confirmation.

Finally, it is important to consider that one of the objectives of the REGDOC is efficiency. The

sooner CNSC staff are engaged with a licensee, the earlier we can align our consultation activities and address potential issues. It is staff's opinion that the requirements will not cause a significant workload to licensees and that the additional work it does create will benefit the process by making it more effective and efficient.

The version of the REGDOC that was sent for review referenced the potential need for CNSC staff to be made aware of any mitigation or accommodation measures that may be included in a private agreement between a licensee and an Aboriginal group. Based on the comments received, this was interpreted to mean that CNSC was requesting access to the agreement. Revisions were made to clarify that CNSC would only want to be provided information related to mitigation or accommodation measures, if included. In most cases, such information is included in an EA report; however, it has also been known to be included in impact benefit agreements.

Once the REGDOC was revised and the disposition table was completed, copies of both were emailed to the 17 respondents. Shortly thereafter, staff offered to meet with each respondent. Teleconferences were held with Cameco, Bruce Power and OPG, and face-to-face meetings were held with the Métis Nation of Ontario and

Hiawatha First Nation. The meetings provided an opportunity for respondents to ask questions, share their opinions about the revisions made and the responses provided in the disposition table, as well as to share any outstanding concerns. Four respondents, Cameco, OPG, Bruce Power and NB Power, also submitted additional written comments to the CNSC following the meetings.

Based on the feedback provided, a number of revisions were made, as listed on the slide. The major change is the new requirement whereby the licensee is asked to determine the applicability of the REGDOC. While information was provided in the background to assist a licensee to determine if the REGDOC would apply to their proposed project, staff decided that it would be clearer if this step in the process was made into a requirement. By doing this, it makes the REGDOC clearer and supports the goal of early discussions between a licensee and CNSC staff. If requested, CNSC staff will be available to help licensees make this determination.

Other changes included adding the provinces as a resource that licensees could use to identify Aboriginal groups, listing benefits of establishing protocols with Aboriginal groups and making small revisions to clarify terminology.

The feedback provided to staff led to

further revisions to the REGDOC, which was sent to the respondents for their information.

If approved, REGDOC-3.2.2 Aboriginal Engagement will be immediately published on the CNSC's website following the Commission's decision and will supersede CNSC's guidance document Supplementary Information for Licensees: Aboriginal Consultation.

CNSC staff will work with licensees throughout the development and implementation of their engagement process. CNSC staff's role early in the process will be to provide guidance and clarification. Later, CNSC will take a more active role in that at the appropriate time staff will determine if the proposed activities described in the licence application will likely raise the duty to consult and create its own consultation plan as appropriate. In its CMD, staff will also include an evaluation of the licensee's engagement activities to assist the Commission in its decision-making.

Should the Commission include direction to licensees to continue their engagement activities in the Commission's record of decision, updates can be provided to the Commission using existing regulatory tools such as the Public Information and Disclosure Program and regulatory oversight reports.

CNSC staff will continue to reach out to

licensees and Aboriginal communities to clarify expectations and implementation of REGDOC-3.2.2.

Staff are also willing to continue meeting with Aboriginal groups alongside licensees. This approach has received positive feedback in the past from Aboriginal communities. Some examples include having CNSC staff available to speak at community meetings or on site tours. Other examples include making a presentation during a day-long meeting and being available throughout the day to answer questions. Licensees and Aboriginal groups will still continue to meet on their own and CNSC staff will also continue to meet with Aboriginal groups one-on-one, as appropriate.

Finally, as Canada’s approach to the duty to consult and licensee Aboriginal engagement continues to evolve, along with the respective case law, CNSC will review and update REGDOC-3.2.2 to reflect new and updated requirements and best practices, as needed.

In conclusion, it is CNSC staff's opinion that REGDOC-3.2.2:

- ensures early and ongoing engagement with Aboriginal communities;

- clarifies licensees' role in assisting the CNSC in meeting its duty to consult;

- ensures CNSC is involved early, reducing

risks of delays in review processes;

- ensures licensees identify the appropriate Aboriginal groups to engage; and

- supports more effective and efficient Aboriginal engagement processes and the development of long-term relationships with Aboriginal communities.

Based on our conclusions, staff believe that REGDOC-3.2.2 Aboriginal Engagement is ready for final approval and publication.

We thank you for your attention and remain available to answer any questions.

THE PRESIDENT: Thank you.

So I will jump right into the question session. I understand some industry people are here in case we want to hear their opinion, but let me start with Dr. McEwan.

MEMBER McEWAN: Thank you, Mr. President.

I will confess I found this a very difficult document to read. I found that there was a lot of double use of "shall" and "should" through the document that I found confusing. I guess my first question is there were a lot of comments. Some of them were very negative comments about the document. What I would like to know is are industry and are the indigenous groups who made those comments happy with the responses that you made and the

changes you made to the document or are there still reservations? It has been unusual for us to see this many quite negative comments to a REGDOC up till now.

THE PRESIDENT: Just while you are pondering about this, in the disposition table normally there was a differentiation between the first round and then the second round. So I don't get a feel as to what happened after you disposed of the first round and you sent them the next revision. I couldn't tell if they were happy, happier, not happy. And there was another third round last time and now I don't know anymore whether you got any feedback. So go ahead and answer the questions of Dr. McEwan.

MS NOBLE: Kimberley Noble for the record.

First and foremost, I think you could appreciate that consultation is really important to us and you saw that in our consultation process.

Second, it's very difficult for us to speak on behalf of industry and Aboriginal groups that we engaged with during this time. We did make an effort after the disposition table was set to seek that feedback and we did speak with Métis Nation of Ontario and a number of the changes that were made were made to address the comments that they brought to our attention in that. So we have sent them back the revised document and we haven't heard

back from them. We have a very good -- I would like to say we have a very good relationship with them. So if they had an issue, I think they would be quick to pick up the phone.

Hiawatha First Nation, we only met with last week and we discussed the disposition table, how we dispositioned their comments, and they seemed to be very happy when the meeting was ended with the way the REGDOC stood as it was.

We understand that industry, some industry still has some reservations about the way it has been written, but we think that there is no outstanding or showstoppers within the REGDOC at this time.

THE PRESIDENT: So this is the time for you guys to show up and I understand that -- who? We have also New Brunswick on the phone, so let's go in order, Bruce Power, OPG and then New Brunswick. Go ahead.

MR. SAUNDERS: Okay. Frank Saunders for the record.

Yes, we reviewed the document and there was a lot of back and forth. Generally speaking, we are fairly comfortable with the requirements that are in the document, although in some cases we have some concerns about the way they are stated. It's not traumatic and most of the stuff that's in there we do today and would continue to do in the future.

Our bigger concern is actually what's not in the document and I know it's not usual for me to ask you to expand regulatory documents, but this is a case where I feel some expansion is required, and unfortunately the work is all on CNSC, so I feel more comfortable doing that.

The issue really is around the determination piece, about determining who needs to be consulted and what levels of engagement are appropriate. We certainly determine that early on in our process and we do communicate it with CNSC. We believe -- and CNSC provides us unofficial view on that. We believe that view needs to be official and it needs not only to be communicated with us but needs to be communicated to everybody via your website or whatever.

The reason is a very simple one, if there is a group out there who believes they should be included and they haven't or so forth, we would like to know very early in the process that that disagreement exists and not find out when we are here in the hearing or just before the hearing that there is a group who feels we have left them out of the consultation when they should have been involved.

So we think that ought to be declared right up front and it ought to be kind of put everywhere where everyone can see it so if there is a disagreement, it

gets raised early, we can discuss it and resolve it early, and then we don't have that conflict at the end. That's essentially our concern.

THE PRESIDENT: I'm confused. They are advocating the earlier the better just to do just that.

MR. SAUNDERS: Yes, except there is no official position on CNSC about whether it's right. It says we give it to them, they will give us some advice, but they don't make an official determination about whether they believe it's right. The Commission of course may decide we are both wrong and that neither one of us got it right, but I think in terms of the Aboriginal groups that are potentially involved, there should be somewhere where it says clearly this is who we think is involved and this is what we think is the level of consultation, so if you disagree, tell us, right.

THE PRESIDENT: Staff...?

MS CATTRYSSE: Clare Cattrysse for the record.

We believe -- because this is very, very early on in the process, we are going to give advice as to which communities, they can also talk to the province, they can go on ATRIS. We are going to give sweeping advice.

The issue is that very, very early on, the project can change and really we just want you to go out

and find out, industry, what the issues are and then once you find out if there are groups saying they have issues, that will determine that you may need to do much more consultation. So we won't know that until you ask those communities what those issues are.

So we are not going to say that you have to do extremely detailed consultation with a certain group if we don't know and we are not on the ground with those communities. So we are asking you to just get out there first, get some information and bring it back. By the time you have come in with an application and by the time we have a solid application, it's much easier to scope in which communities, because again projects change.

And also some of those groups may not have issues following early consultation and engagement. A lot of these issues could get resolved early on and there will not be a need to do as much detailed consultation or even any formal duty to consult, we would just engage ourselves. So that is why we are not going to put down the exact level of consultation. We want to keep it flexible.

THE PRESIDENT: So now I'm confused. So they come in with a project, you do your own kind of assessment about what you think and you send them an email saying this is what we think, don't you?

MS CATTRYSSE: We are going to be

providing advice, but again they are coming in a long time --

THE PRESIDENT: How are you going to provide advice? Is it in writing?

MS CATTRYSSE: Yes. We have done this before where we have put things in writing, but we are not going to say that the level for this community X needs to be this level versus this level. You have to get out and talk to the communities to find out what the issues are. And it also depends on the activity and if you are doing a project, part of why you are engaging with them is to potentially change your project and improve it.

THE PRESIDENT: I get that. I'm trying to understand the process. In the early days you will also accept that it could change over time, so I still don't understand what the disagreement here is.

MR. SAUNDERS: I mean I think the disagreement is really around the timing and what it means, right? In essence, by the time we make application to you for a project, we have done the work already at that point, right? There's no point in telling us it's wrong then, right?

THE PRESIDENT: And that's what normally happens in all the hearings, but they could get -- in the eleventh hour somebody can come in and say you should have

consulted us and they can say it to both sides.

MR. SAUNDERS: Yes, of course they could and all we are trying to do is make it less likely that that would happen. It's our view that, you know, we do our initial consultation before we come to you to see what we think the group should be, and so forth, and at that point we think we should state clearly what it is. It may change, in which case we will change it, right?

You know, if for some reason somebody comes along and says to us, you missed us, and we believe that they shouldn't have been missed, they should have been included, then of course you will change it, but by providing the information in a way that everybody can see early on, you at least flush out those issues that may exist and you may not know about. That is really our whole point. It's not about us per se, it's really about we want to find out as early in the process as possible if there's major disagreements. If there is, then we will try to accommodate them and deal with them throughout the working period.

Once we have made the application, we have done much of the work. So at that point everything that we find out that's new will create delays in the project. So it's really about how the work happens in the process. I don't see any issue with putting out a thing saying we

think this is a consultation group and this is the level of consultation and then changing your mind a couple of months in if somebody makes a convincing argument to you that you didn't get it right, and you simply republish it and say based on this input this is what we are doing.

THE PRESIDENT: The duty to consult is government, not you. So the staff on their own will have to decide early in the game --

MR. SAUNDERS: Yes.

THE PRESIDENT: -- who should be the target here, and they will do this anyhow. So I don't think there is a big difference between you two.

Before we conclude, I would like to hear from OPG and New Brunswick.

MR. MANLEY: Robin Manley for the record, Ontario Power Generation.

First off, let me say that OPG believes that the CNSC staff did make a very good effort in responding to the reviewer's comments. So in response to Commissioner McEwan's view there, you know, yes, we think that there was a good review, a good disposition of the comments and we appreciate CNSC staff's effort in that regard. Also, as one of the staff said, we don't believe there are any showstoppers, okay.

So, you know, there are a few minor

residual issues such as what Frank Saunders had mentioned and we think we can work through those with the CNSC staff along the way because we do maintain an open and constructive dialogue with the staff.

I would also like to say that, you know, we view that OPG already has in place essentially all of this. We feel that we maintain a robust indigenous relations program and we are working on building at that on an ongoing basis. This document I think provides some clarity and some good guidance going forward on how to make sure that that is established across the board.

In the specific point that Mr. Saunders mentioned, yes, we have the same point. Perhaps it's a legal distinction, I'm not truly qualified to judge that, but, you know, taking it as the Crown's obligation to determine and confirm which are the First Nations and Métis communities that we need to engage with, while we might be in the best position, having the boots on the ground, to identify those and then provide that list to the CNSC staff to review, ultimately we need a determination that we have it right. So that's perhaps a subtle distinction, but I think that's where we are perhaps a little bit stuck there on that point.

THE PRESIDENT: Okay.

New Brunswick...?

MR. NOUWENS: Jason Nouwens for the record, New Brunswick Power.

So similar to the comments you just heard, you know, we have long recognized that Aboriginal groups hold unique constitutional rights and we have continuously tried to maintain a positive relationship. We have put in certain efforts to engage and communicate with the various Aboriginal groups. You know, it is our belief that a strong engagement process will facilitate discussions and make any further engagement, you know, a positive experience.

Similar to Robin's comments, CNSC staff, from a disposition point of view, have provided comments and we overall believe that the document supports what NB Power has been trying to do for a long time, so overall we are in agreement with it and we are, I guess, happy with the engagement that we have had from CNSC staff.

THE PRESIDENT: Thank you.

So can we go to the next one? Okay, Monsieur Harvey...?

MEMBER HARVEY: I was surprised to see that you sent the current version of the REGDOC to all commenters last January, because you had two rounds of consultation and then you come in front of the Commission to ask for adoption for publication and it's like if you

are not sure that you sent the document and, I don't know, hoping to have other comments before coming in front of the Commission. So what was the objective of doing that just one week or such before the meeting of the Commission?

MS NOBLE: Sorry, can you repeat the question?

MEMBER HARVEY: The question is the -- okay.

MS CATTRYSSE: I'm just going to -- there may be a bit of a misunderstanding and I hope we didn't do a typing error. This is Clare Cattrysse, for the record.

We put the document out again just this January, so just recently, as of I think it was January 15th. Yes. We have it written here, 2016. The reason we just put it out again was we added, as we mentioned in the presentation, the new requirement, which was determination of applicability of the REGDOC, which is the first requirement. Before, it was just a piece of guidance and we decided that it was important to make that a requirement. So we sent that out to everybody to let them know that we had made that change before coming here. I hope that clarifies the question.

MR. TORRIE: It's Brian Torrie for the record.

Just to add to that, it's fairly typical

that we would send out a REGDOC in advance of the Commission hearing, if that was the question, why we sent it out. That's part of the process usually.

MEMBER VELSHI: Thank you.

Before I get to my question, I just want to make a comment which was said already, is that I found the comments confusing only because I didn't know what the original document looked like and then these comments, how do I read that? I have a revised document and then I don't know what the later documents and then what, if any, residual comments are. So not so much on this REGDOC but more on the process, I think it would be helpful for us if we were to get a semblance of, you know, what were the comments the second time around, and if there are any residual comments at the end, what those are.

So then as I looked at some of the comments, I wasn't sure whether they had been addressed or not, and I will give two as examples.

So one was comment number 20. This was on what resources do the indigenous communities have that the licensees or the proponents should take that into consideration. The comment was -- and how do you close that gap and is there an onus on the licensees or proponents to do something about it? I think the REGDOC just says you should consider what kind of resources they

have as opposed to are you supposed to be able to facilitate that and what is the guidance or requirement around that.

So that was one. I will give you the two and then maybe you can comment on that.

The second one was on comment number 9 from Cameco. "Inconsistent with existing federal guidance and jurisprudence," I think was their concern, and again it wasn't clear to me, well, is it, is it not and has that been addressed?

If you can maybe comment on those two, and perhaps maybe even on the process.

MS OWEN-WHITRED: Karen Owen-Whitred for the record.

I just wanted to make note to respond to both your comment and the previous comment that we can certainly improve that, the structure of the comment distribution table in future in cases where there are multiple rounds of consultation, to make it clear -- to differentiate those.

And certainly, to go back to the previous round of questioning, if that has led to a misimpression that there are outstanding negative comments on the document, we want to take the opportunity to clarify that, and as we have already heard, it's our understanding that

all of those comments have been dispositioned and that the current document you have before you, that all of those comments have been addressed and that there are no outstanding significant concerns.

So with that process piece, I will turn it back to my colleagues for your other questions.

MS CATTRYSSE: Hello, this is Clare Cattrysse for the record.

I mean overall, just in terms of what the document looks like now compared to what it looked like before, it's not that much different. There was a lot of wordsmithing as it is a very sort of legalistic subject matter area that everyone wanted to be very careful with the wording, so we did spend a lot of time touching up some of the wording.

With respect to your comment, I believe it was number 20 I believe by the Hiawatha First Nation about covering costs for First Nations and reimbursement, all that we did is we did make reference and what we did state in the document is that we do look for an early engagement prior to anything coming to government for decisions, is that, you know, industry do look at capacity. And what we did is we referenced the federal guidelines, and the federal guidelines and the new document that they have just put out, which we mentioned has gone out for review, a

document, federal government document for proponents, they all say the exact same thing. So we are just mirroring the language that's out there and the federal language for that statement on capacity.

MEMBER VELSHI: So let me then ask very specifically: What is the expectation of, say, OPG Bruce Power for instance if they go, well, here is a community that doesn't have perhaps the requisite technical expertise, or whatever it is, is it the expectation that they fund it, that they come to the CNSC for the Participant Funding Program, that they provide independent experts to work with them? Is there any guidance around that or is this where they pick up the phone and ask you folks, hey, what do you recommend?

MS CATTRYSSE: I mean there is guidance out there federally. It's not very strong, but again it is proportionate to the type of level of potential impact that could be in that community and that is sort of where the guidance goes. But it's really up to industry and licensees to decide if they want to or how much they want to.

We do up the participant funding. Again, it also depends on the process. I mean if it's going through a detailed environmental assessment, we do also offer the Participant Funding Program here at the CNSC. So

we can offer funding as well, but again it depends on the process.

The licensees, if they want someone to help review a document, that's up to them if they want to fund these things, but also again, we at CNSC have a Participant Funding Program. We can offer some money if they want to have meetings with our staff to talk about the technical issues about the project. So there is some flexibility there with respect to how the funding can go out.

I don't know if I have answered your question, I'm sorry.

MEMBER VELSHI: Yes. I mean that's fine. I didn't expect, you know, the list of things to be done. I just wondered. And particularly since it came from one of the indigenous groups, I mean I think it sounds very reasonable that they need to know how do we try to build this capacity when needed and who do we go to for that.

THE PRESIDENT: Well, I will say a couple of things.

First of all, if you listen to the new government, there will be a whole new set of programs/regulations I predict that will force us to amend this in the near future anyhow, because they are talking about now increased deepening consultation and

accommodation. So we will see what that leads to.

Every licensee behaves differently. You will have to determine what kind of relationship you want to have with Aboriginal communities. The one thing you don't want to do is -- how do they call them -- fly-by-night consultation, somebody goes in, does a PowerPoint and figures that that's it. You have to do a lot more than that, and that requires resources.

We do not want to come in and be prescriptive on how you do that, but, you know, the idea of getting acceptability, it's out there, it's a lingo that you hear more and more ministers talk about. It is not necessarily in our mandate, but it requires us to do some deep consultation.

So it would be very helpful on a big project that the proponent can come to us and say we have the support of the community, because if you don't have the support of the community, you are into a different space, as you know. So how you get the support, we leave it up to you. I'm sure you are creative enough to know that.

I think that is what is behind some of the language here that is not very specific, but I predict that I will get more specificity very soon from this new government.

So where were we now? Mr. Tolgyesi...?

MEMBER TOLGYESI: That was one of the questions on page 3 of CMD M5. You are saying in the before last paragraph that:

> "CNSC encourages licensees and Aboriginal groups to develop an engagement plan that is reasonable for both parties." (As read)

What happens when the parties are unable to reach a kind of reasonable position for both of them?

MS NOBLE: It's Kimberley Noble for the record.

So basically what we are encouraging is that the discussions start and we try to find a win-win situation so the licensees and the Aboriginal groups can work together through the review of their project. If they come to a standstill, either the licensee or the Aboriginal group could come to the CNSC to see if we can help resolve that matter and we can step in to see if there is room to resolve that matter.

But at the end of the day, as the Crown and as the Commission, you will have to make a decision if the engagement activities that were conducted met the duty to consult. But we really are trying to promote a positive, longlasting and trustworthy relationship between licensees and the communities.

MEMBER TOLGYESI: So on Slide 18 you are saying that:

> "Section 3.2.2 revised, clarifying CNSC is not looking to read private contracts between a licensee and an Aboriginal community."

However, the second bullet is:

> "CNSC will need to know if mitigation measures and other forms of accommodation to address adverse impacts have been included in an agreement."

So how will you know if you don't read the report?

MS NOBLE: Kimberley Noble for the record. So we will rely on the licensees to bring that to our attention. We are clearly stating that we are using -- we may be using their information to help us meet the duty to consult. What we are not interested in is if there is financial commitments that they have made between groups, that is a private contract between those two parties. But in assisting us in meeting the duty to consult, if they have made agreements on mitigation or accommodation measures, we are asking that that be brought to our attention to help you make your decision.

MR. SAUNDERS: Yes. In general, there wouldn't be an issue with most of this. We do try to keep the things separate. I mean we may have a contract with an Aboriginal group that has nothing to do with a consultation, it's just a normal contract, and sometimes there can be a little spillover between the two in that work we are doing in one place is the same as the work we are doing in another. And there can be sensitivity on the part of the community as well as on us about what is in that contract. So there wouldn't really be an issue.

We would certainly list anything that we believe is for accommodation purposes and the First Nation group involved would be free to agree or disagree with whether that's true or not. So I don't think the Commission would lack any information because of that. It's just that you do need some ability to keep private contracts private for the two parties involved. And if there was really a need to separate it out so it could be visible, I'm sure that that could be done.

MEMBER TOLGYESI: Are impact benefit agreements part of these Aboriginal agreements or they are not? Because like mining companies, you know, Cameco, they sign impact benefit agreements with the communities. So it is part of this Aboriginal agreement and this REGDOC.

MS NOBLE: Kimberley Noble for the record.

Impact benefit agreements are becoming more and more popular between licensees and Aboriginal communities. Again, it's not for us to ask for access to the entire agreement. We are simply asking for that information that will help your decision on meeting the duty to consult.

MS CATTRYSSE: Clare Catrysse for the record.

Impact benefit agreements, it's up to -- they have different objectives, it's not always about reducing impacts to rights. There can be elements of them that show a type of mitigation inside them and if that is the case we are asking them to document what that mitigation is. An impact benefit agreement might say we may not drive our trucks or make a certain amount of noise during certain amounts of times when you are doing your burial ceremonies at your burial sites. These are sorts of things that they have put into an agreement along with potentially money, but we just want to know about some of those mitigation measures if they are in there, because again then we can come back to you and say, you know, this has been agreed upon and therefore there shouldn't be any impacts.

MEMBER TOLGYESI: The impact benefit agreements include not only the noise but lots of other

things also that support the community, so many jobs, et cetera, et cetera. So those things are, I will say, private too, the agreement between the company and the community, and as soon as you have that information, CNSC, in order to be transparent, as our President is saying, these documents should become public. No?

MS CATTRYSSE: Clare Catrysse for the record.

We are not asking for those documents, they are private documents, but what we do do is part of our job is going out and talking to communities, so we would obviously be talking to a certain community before they came to you, and say, you know, how are things, how are you feeling, what is your relationship with the licensee, but also, in light of your agreement or some of the mitigation that is being posed, are you still feeling that you have impacts to rights? We need to hear that, and if so, we have to document that and we would bring it forth to you.

THE PRESIDENT: Okay.

Next one, Dr. McEwan...?

MEMBER McEWAN: Thank you, Mr. President.

I think one of the things as I have been reading this, it makes the consultation seem like an activity rather than a process and I think it clearly has

to be a process if it's going to be successful both in terms of the specific project or the specific activities related to a project and the ongoing relationship between the proponent, and so for example a couple of things just strike me as slightly odd.

In 4.2, on page 7:

"The Aboriginal Engagement Report shall include..."

And then you put a list of really quite mechanistic activities. I see no description of an expectation of understanding what the goals of that specific process are.

I mean if you are going into an activity or if you are going into a process, certainly in my experience it helps to understand what your endpoints are going to be, what your goals are going to be and what you hope your outcomes are going to be, and it seems to me, in the absence of that, simply providing a list of what you did is not particularly helpful in helping us understand whether or not this was a process that worked or not.

MS NOBLE: Kimberley Noble for the record.

So if you go through the things we are asking for, I think what you are looking for, and it is being asked in the report, is what are the issues that were raised and how were those addressed and those should be

clearly identified to you when we come to you, either by the CNSC and the licensee. So this group raised these concerns and either through the environment we were able to mitigate that or an accommodation measure was required. So you can clearly identify the connection there, and that is going to come out in the report and that is going to be evident in the CMD. So that should be helpful.

But some of the other information is for us. Once we receive it, that will help us do our analysis, our preliminary analysis. We will identify the groups that we think are necessary and then we will be able to compare who have they identified, who are we identifying, are they aligned, is there some differences, and then again that conversation starts to say, well, we identified a couple more groups, they could say, well, we don't really think that we need to consult with them, and we can have that discussion and we can make a path moving forward on that. So that is where it is very utilitarian I guess, but that's the type of information that we need that we can also do our analysis to move that process forward.

MS CATTRYSSE: Clare Cattrysse for the record.

We just -- I mean we are looking for -- this isn't just going out and talking to the general public. This is very different. It's asking questions

about potential and established rights and that's what this REGDOC is about. It's about finding out what the issues are and seeing if there are potential impacts being raised and being declared to be raised against rights. This isn't something you are just going to get from -- I guess we need to get that information earlier. And also, if licensees can reduce and get rid of those impacts by changing the project early on, then that's the message we were hoping came out of this document and the guidance and all the supporting material that we have put in here.

THE PRESIDENT: Well, my interpretation was also that this is to document also for the Commission to make a decision about whether appropriate effort was done, particularly in an area when there may be disagreements. At the end of the day the Commission will have to decide whether we discharged our duty to consult and that has to be based on some sort of evidence provided to us, and some report, that's a function. It's not guaranteed a success, as Dr. McEwan keeps talking about, but at least it's documenting what has been done and hopefully with all the -- if the right things were done, you will get the support. That's the way I interpret this requirement.

MS CATTRYSSE: Clare Cattrysse for the record.

Yes, very well put. And also, you are going to have Commission Member Documents with material in it from industry as well as from us and so there will be the two differing storylines, you will have all the information. And a huge element that we as the Crown have to be very careful about is documenting. We have to keep track of the Crown record of meetings and things. So if licensees are engaged earlier, we can get out earlier and we can start documenting those times and those records and those meetings, which again will help as evidence to you to show that we have been out there early.

THE PRESIDENT: Okay.

Monsieur Harvey...?

MEMBRE HARVEY : Merci, Monsieur le Président.

(Off microphone). We have done that in the past and we will continue to do it in the future. So is this to say that the obligation for the licensee, let's take Darlington for example who came in front of us recently with a big project, that what has been done by Darlington, by OPG won't be so different in the future?

MS CATTRYSSE: Clare Cattrysse for the record.

I mean yes, some of the licensees have done absolutely phenomenal work and they have been very

good at documenting that and getting it to us, and we do with some licensees meet with them quarterly and I believe we are doing that with some now just to talk about issues at the stations and Aboriginal consultation matters. So we are hearing about things early and then we are able to tell them, look, maybe you might want to get out and talk to some of these groups about your particular upcoming licence. So yes, we are seeing great things.

But we have also -- there are new licensees that will come in or there will be modifications made to a licence that just looks like a licence renewal, but it looks like a small thing that could actually have bigger implications to a community on the outside. So we just want to make sure there is clarity and consistency among everybody in terms of how this process is followed and for those that are doing a great job, good for them, keep doing it, just document your information, please, and get it to us.

MEMBER HARVEY: So it's much more for newcomers than for those licensees that have been there for years?

MS NOBLE: Kimberley Noble for the record.

Yes, it really is. Like we said in the speaking notes, we don't really think it is a significant amount of work, additional work for the existing licensees.

Like we said, many of them have dedicated programs already. It's the point of giving us, actually giving us that information earlier on so we can make sure that those surprises that they are worried about don't happen or we reduce that risk of that happening.

And yes, there is a focus on new licensees. So if you are in a new location, new project, make sure -- because then you are looking at building new relationships and those take time, so make sure you start that early. So that's really the point. And we want to make sure this is clear so we can all have an effective and efficient Aboriginal consultation process.

MEMBER HARVEY: Another point was about engagement. The licensee can have a very deep engagement to succeed, but to succeed you have to have the engagement of the other party or parties. So is there something that can help that? Because sometimes it's very difficult to get answers, to get the participation of the other parties.

MS NOBLE: Kimberley Noble for the record.

Just to be clear, by "other parties," do you mean the Aboriginal communities?

MEMBER HARVEY: Yes.

MS NOBLE: So the Supreme Court of Canada has identified that Aboriginal communities do have an obligation to share that information, to share their

rights, to share their asserted rights, to identify adverse impacts when a licensee or the Crown is coming to ask that information, so there is an obligation. And of course, just like the best practice, it's easier to get that information if the needed capacity is there to help them do that and it's a lot easier to get that information when they trust the organization that they're working with. So if they can trust you and you are helping them participate in your review, you are more likely to get that information from them.

MEMBRE HARVEY : Merci.

THE PRESIDENT: Thank you.

Ms Velshi...?

MEMBER VELSHI: A quick question. You mentioned, you know, legalistic, have to get the terminology right and at the outset you mentioned some of the changes. One of them was around replacing "potential" with "existing" or "established" Aboriginal or treaty rights. Your Slide 15 hasn't changed that and even in some of your discussions you still mention potential or established Aboriginal or treaty rights. So what's the difference between existing or established rights? Is there a difference? Is there a nuance here that I'm missing?

--- Off microphone

MEMBER VELSHI: Yes, existing and established, not potential.

MS NOBLE: Kimberley Noble, for the record.

So an established right -- an established right would be recognized either in a treaty or in case law or in a modern treaty. So it's recognized it's firmly -- asserted or potential would be where --

MEMBER VELSHI: Sorry. I thought the word that replaced it was "existing"?

MS NOBLE: Sorry, to be clear, so the Constitution was written -- section 35 used the terms "existing Aboriginal and treaty rights are recognized and affirmed". Once the Supreme Court had their decisions in the 2004-2005 cases, they added -- when they decided to determine there was a duty to consult on the Crown -- based on the honour of the Crown and Canada's unique relationship with Aboriginal peoples, they included at that time -- this also included potential rights, so those that may be recognized later. So that's why again they have identified that.

The duty to consult is raised at a low threshold. So if you have a credible assertion you have an obligation to consult with that group.

MEMBER VELSHI: So, if I've heard you

correctly why have you made a change then and removed "potential"?

MS CATTRYSSE: We are talking to -- there was a quote about the *Constitution* and when we said we wanted to make a change there was a typo. Our computer actually changed -- it should say "existing".

The *Constitution* talks about existing rights. The common law that came out of the Supreme Court rulings then went the next step and said you look at potential rights. So we were just trying to be very careful. This is what I mean, the legalistic terminology, to just get the terminology right.

MS NOBLE: If I can help, if you turn to page 3 of the REGDOC, at the top of page 3 it says -- the bullet that sits there says, "Section 35 of the *Constitution Act* provides that..." and section 1:

> "The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed."

So basically, down below in section 2 under "duty to consult" we were just repeating that statement but, in the formatting, "potential and established" got switched with "existing". So it's just a technical error.

MEMBER VELSHI: Okay.

THE PRESIDENT: Mr. Tolgyesi...?

MEMBER TOLGYESI: So I am still on page 3, section 2 "duty to consult" and there are three bullets. And what you are saying,

the common law duty to consult and where appropriate, accommodate is raised when the following three factors are presented; contemplated, can conduct, potential adverse impact and potential or established aboriginal or treaty rights." Should it be read as "where appropriate a comment is raised when at least one of the following three factors is present"; they should be all three or one at least?

MS NOBLE: Kimberley Noble, for the record.

That is the Supreme Court's test and they have said all three factors have to exist; all three.

THE PRESIDENT: We don't have the power to amend them.

--- Laughter / Rires

THE PRESIDENT: We don't have the power to amend that.

Okay. We are back to Dr. McEwen.

MEMBER McEWAN: Okay. So we had some very careful questions I think from the Aboriginal groups who came back with questions. Were they given an opportunity

and the capacity to come to this to present? Because I think it's been a gap as we have discussed this document that specifically those communities are not here and able to comment.

MS NOBLE: Kimberley Noble, for the record.

We didn't have any requests from the groups to come today. That may be because in a Commission hearing we don't have public interventions so there may not have been -- sorry, in a Commission meeting where there is not the public interventions, it may have been understood that there was not an opportunity to speak with you today and intervene in this meeting.

MEMBER McEWAN: Were they overtly invited?

MS NOBLE: Kimberly Noble, for the record.

We certainly identified that we were having the Commission meeting; it's open to the public. They can watch webcasts live.

MEMBER McEWAN: Were they overtly invited to attend?

THE PRESIDENT: No, they were not invited in a meeting.

MS NOBLE: No, I don't think I specifically --

THE PRESIDENT: Just like industry is not

invited. I mean they just --

MEMBER McEWAN: No, I agree, but I think given again this issue of capacity.

THE PRESIDENT: But they did get -- can you go back to square one? They did get --

MS CATTRYSSE: The communities did get participant funding if they wanted to. We have never done this before ever with a regulatory document so we did provide participant funding to review the material. The comments went back. There was discussion and --

THE PRESIDENT: So they did -- they did --

MS CATTRYSSE: -- we did meet with the communities face to face as well.

THE PRESIDENT: Okay, because you are going too fast. Did they cash in? Did they get money to do formal review? Did they do the formal review?

MS NOBLE: Kimberley Noble, for the record.

So the three groups that we identified came forward and applied for the funding and two received up to $2,000 to review and provided comments.

THE PRESIDENT: Why did Hiawatha not receive?

MS NOBLE: They chose not to participate and they -- I think at the end they said the other two --

because they are very close communities. So the comments provided by the other two communities meet our concerns.

THE PRESIDENT: So, after they submit their comments, which round was that, round one or round two?

MS NOBLE: So that was round one and then they would have been provided the funds.

THE PRESIDENT: Okay. So after they submitted comments you revised the document. You send back to them?

MS NOBLE: Yes.

THE PRESIDENT: Did they comment fairly on round two?

MS NOBLE: Those three First Nations, no.

THE PRESIDENT: So you assume then silence is approval?

MS NOBLE: We did follow up. Not only did we email them directly but we did -- my colleague Adam Levine(ph) and I did follow up with each community by phone to say, "Do you want to meet any further or have these discussions?" From there that's when the Métis Nation of Ontario said, "Yeah, we would like to meet with you". I flew to Toronto and I met with Métis Nation, two staff there, and we had a meeting.

Adam Levine met with Hiawatha First Nation

and through the Participant Funding Program we were able to fund that meeting where a number of counsellors and staff, consultation staff attended that meeting where we talked about -- they talked about the REGDOC and they talked about our independent environmental monitoring program.

THE PRESIDENT: So it's your view they are satisfied that you have paid attention to their comments?

MS NOBLE: Yes.

THE PRESIDENT: Dr. McEwen...?

--- Pause

MEMBER VELSHI: Did you do any benchmarking? Any other agencies have a similar document; NEB or whomever?

MS CATTRYSSE: Clare Cattrysse, for the record.

Yes, we did look and we are breaking new ground here. The guidance that went out for proponents that is still a draft that went out by Indigenous Affairs Canada is we are following exactly the recipe book that they are putting out.

MEMBER VELSHI: And your qualification of your contract that I am really glad to see it as an appendix, because it also seemed like many of the respondents weren't even aware that it existed, does that need to be revised given the new federal document coming

out and this particular one?

MS CATTRYSSE: Clare Cattrysse, for the record.

We will update. It is currently an evergreen document. That's why we were a bit wary about adding it to the document because it does change quite a bit. But we will have to just revise the regulatory document as new materials come out in the federal government. We do anticipate the guidelines may change within the next year and we are also anticipating some other products may be coming out in the next couple of years as well.

THE PRESIDENT: So for the next round, I would strongly recommend you merge it. It is not "them and us"; it's both of us in this duty to consult where we have the Crown responsibility. We use the industry to develop those relationships. It's both together and they belong in one document. And besides, it took me a while to find that codification in our regulatory list of things, not a good practice that it's not part of our regulatory schemes.

So I am very happy to see it as an appendix as an interim measure. Because I do believe by the way that we are breaking ground here. We are the first kind of a regulatory body to actually try to codify this practice and I'm sure with the new government there is

going to be a lot of new initiatives coming up that will force us to update this on an ongoing basis.

Mr. Tolgyesi...?

MEMBER TOLGYESI: Two very quick ones, and that's it.

On page 12, Appendix A, on the top you have, "Hence, the Aboriginal groups continually occupy the area near the regulator's facility".

How do you define continual occupation in cases where is hunting, trapping and that kind of activities?

MS NOBLE: Kimberley Noble, for the record.

So that terminology is very familiar -- similar to the legal context of how an Aboriginal right might be defined. So for Aboriginal people or First Nations people it would be "occupied or used prior to our time immemorial" since the time they have been here. In the case of Metis assertions it would be since the time of British occupation and control.

MEMBER TOLGYESI: So, when you're talking about hunting it's included in occupying the territory, I suppose?

MS NOBLE: Yeah. That's a little different. So where we would talk about an Aboriginal --

when we talk about Aboriginal rights, typically you are looking at the practices; hunting, trapping, fishing, harvesting, cultural ceremonies, that sort of thing.

MEMBER TOLGYESI: Okay. And my last one is you are talking one, two, three, four, five, six bullets from bottom, "Does this Aboriginal group have a sovereign government?" Sovereign government means elected government, like communities they have elected chief and that's elected government; am I right?

MS CATTRYSSE: Excuse me, sir, which?

MEMBER TOLGYESI: Page 12, one, two, three, four, five, sixth from the bottom. "Could the status of land...", that starts like this. In the second line you have, "Does this Aboriginal group have a sovereign government?"

MS NOBLE: Kimberley Noble, for the record.

So in cases like this where a modern treaty has been negotiated they could have a sovereign government which would be elected.

MEMBER TOLGYESI: Oh, so community has an elected chief, et cetera that’s a sovereign government?

MS NOBLE: To be clear, on reserve where you have chiefs and councils, those are also democratically-elected voted.

THE PRESIDENT: These are just guidelines or kind of considerations. They are not checklists about yes or no; these are kind of a consideration about the kinds of issues that you should consider?

MS NOBLE: Kimberly Noble, for the record. Exactly that. Thank you.

THE PRESIDENT: All right.

Dr. McEwan...?

MEMBER McEWAN: Sorry. I just have one more question, and that's Table 1 on page 4.

THE PRESIDENT: Table 4 of the --

MEMBER McEWEN: Yeah. I really found this a very, very difficult table to understand and it's a shame because I think it actually is key to the whole document. In this table you have encapsulated what you are saying in the whole document.

First of all, it's not a spectrum. It's two boxes. But I really think it could be presented in a much clearer way and in a way -- so for example, I spent 10 minutes -- this probably reflects my ability to use English -- wondering what you would do if you had a weak claim that there was a potential for serious adverse effects. How do you merge the two boxes?

MS CATTRYSSE: This is Clare --

MEMBER McEWAN: I know that's not -- I

have now worked out very slowly that that's not what it intended, but I really think that that could be displayed in a way which was much more helpful to the whole document.

MS CATTRYSSE: Hello, this is Clare Cattrysse, for the record.

This is actually taken from the guidelines from the federal government and we do -- as a practitioner in this area I can assure you it is very challenging working with this. So typically I am just going to let you know our CNSC policy has just been to err on the side of consulting much more fulsomely than might be indicated in this.

Also this document is under review and it's having quite a significant overhaul, so we are hoping there will be much better guidance that we can take and add to our document. So we will keep you posted on that as well.

THE PRESIDENT: But in this case, you know, just because another agency -- even if you want to use it, if you use it and you find it's challenging, either you get rid of it or you explain the way we -- you will apply it so there will be a little bit more clarity. You don't have to take it verbatim if you don't agree that it's really helpful.

MS CATTRYSSE: Yeah, this was taken from

what came out of the Supreme Court. So it's taken a lot of people to try and understand what it's saying. But, yes, we take this out and --

THE PRESIDENT: You mean in the Supreme Court decision there was a chart like this? That would be a new advance in the -- no, I think this is some interpretation of what they said.

MS CATTRYSSE: That is correct.

THE PRESIDENT: Right. And they are trying to be helpful and sometimes it doesn't work.

MEMBER McEWAN: But also, you say at the bottom, "informed by" which implies it's your own table rather than taken directly from.

MS CATTRYSSE: We added one sentence, at the top "potential for adverse impacts to Aboriginal land or treaty rights" and put the arrow across because we thought that might make it even more easy to understand, whereas they only use the word "consultation spectrum" in the federal guidelines.

Your point is noted. We struggle with this as well. But as I said, again, our policy and when we give advice especially when we are -- if we have the file and an application has come in, we are going to err on the side of consulting more so. If we hear anything about a right whether it's weak or not, we are going to be

consulting.

MEMBER McEWAN: That sentence above, because again what you say there, Table 1 depicts the consultation activity that CNSC uses, not that CNSC is guided by in building its considerations.

MS NOBLE: Kimberley Noble, for the record.

We'll take your comments, and when we revise this again we'll definitely try to make this clear and easier for everyone to use.

THE PRESIDENT: I am surprised that -- I guess the industry understood this because we didn't get any comments on that particular table, I assume.

MR. SAUNDERS: Well, I think we could offer our view on this whole area of Aboriginal consultation and the lack of clarity and the difficulty it causes. So we have come to expect it won't be clear. We will just have to work through it and that's essentially what we do.

So there is a spectrum. It's always a difficult discussion about where it applies and face to face is the only way we can resolve it.

So I agree with you. It's not clear but the whole area is not clear, so there you are.

THE PRESIDENT: We either spend a lot of

effort on the front or we spend a lot of effort in some courts or in the back. You know, so your comment about erring on consultation is probably correct.

But I still think if we keep this table you need to explain that you added this sentence on top and why and how you would use it.

Any other -- and which reminds me actually also. In your document in the CMD; I think it's the CMD on page 2, on the last paragraph, REGDOC 3.2.2, so here is where when I started reading this and I got confused. We are talking about four different documents. So I just want to make sure. So the quantification of care -- so 3.2.2 "Support the codification". Support the codification still remains an active document, okay.

The next one is "supersedes the supplementary" so that one you get rid of, right? It will be taken out of the list.

And the next one is "has been informed by the guiding principles for Canada outlined blah blah blah". This is the -- whose is it? This is the Justice? Whose report is it?

MS CATTRYSSE: It's Canada.

--- Laughter

MS CATTRYSSE: But led by --

THE PRESIDENT: Is it INAC?

MS CATTRYSSE: INAC, yes.

THE PRESIDENT: Is it INAC or Justice?

MS CATTRYSSE: No, it's led by INAC.

THE PRESIDENT: Okay, so that's a fair -- and then there is also at the bottom "in alignment with". "In alignment with" is that the draft consultation is going on in town?

MS CATTRYSSE: That's the -- Clare Cattrysse, for the record.

That's the consultation that's taking place right now in their proponents' guide that they have just put out. So we have read through it. We have talked to the staff. Based on feedback coming in, our document is following pretty much exactly what's in that.

THE PRESIDENT: So that one we will have to wait to see until it's finalized. It may force you to try to amend, maybe or not. I don't know.

My last question on this one is, did you look at some of the provincial duties to consult? You know there is one in Saskatchewan. I think there is one in Ontario they are working on. How does -- how do they differ?

MS CATTRYSSE: Clare Cattrysse, for the record.

It was a long time ago now because they

keep changing but, yes, of course we have been looking at how the provinces delegate and they all do things a little differently from one another. We have seen cases where they have given complete procedural delegation to industry to do the full blown consultation for them and just to submit it and then use that material. There is others that have just asked for some information to be collected.

You have to remember, though, it's being done by the province. It's at a very high umbrella level and we are talking --

THE PRESIDENT: But you just recorded saying in B.C., there is a court case that you cannot delegate this. So I don't know if industry, if you -- what's your view on the Ontario government's duty to consult responsibilities?

MR. SAUNDERS: Yeah, in truth, I can't offer too much of an opinion on it because, you know, we are an established site in one location. So we don't typically get into the kind of projects where this becomes a major issue. Certainly, the provincial government is quick to tell us what they expect of us in certain areas around the "A"s for, you know, like temperature and that sort of thing. So you know, I think I just continue to say in the industry by and large we find the whole area very confusing. We're near sure when we start what the finish

is going to look like.

You asked about the table a minute ago and that's really why I would like to see the determination up front by the legal authority because it helps to place you on that table. It's maybe not a final decision but at least gives you some certainty about where you are.

And from our perspective as an industry it is a difficult task to get through a project and understand at some level whether you are doing the right things or not. If you are getting agreement then you will feel reasonably comfortable. If you have some issues you disagree on, there really is no arbitrator. There is kind of nowhere to go and get them settled. You just try to resolve them yourself.

THE PRESIDENT: Okay, thank you. Mr. Harvey?

MEMBER HARVEY: A question. On page 6 the bullet before the last one, translation of information into the native language of the Aboriginal groups engaged where appropriate, is there any -- "where appropriate" is very large so is there an indication or rules to follow, because there is a mass of documents.

MS NOBLE: Kimberley, Noble, for the record.

So what we've seen as best practices,

typically a lot of licensees or proponents will -- if it's large environmental assessment the executive summary and some key information about the engagement has been translated into the local community languages. If a licensee is giving a presentation at a community meeting it may be translated in the local community language or perhaps they have hired a translator so that people can hear and the translation is going on while the information is being granted or given.

Newsletters that go out on updates of the project or what's happening afterwards, that sort of thing has been typical.

I also want to add there is a lot of industry associations out there that also provide a lot of guidance to proponents out there of this sort of information as well.

MEMBER HARVEY: You receive many complaints about that by the Aboriginals that they don't have the appropriate documents to be able to make their own ideas on the project.

MS NOBLE: Kimberly Noble, for the record.

We haven't had a lot of complaints. We have had some requests, though, that if you're having a larger community meeting, it is definitely helpful to have either the document translated into their language or a

local translator on hand so that, especially the Elders, who do give a lot of advice to the community, really appreciate and understand the question that's being shared.

MEMBER HARVEY: Do you want to comment, Mr. Saunders?

MR. SAUNDERS: Yeah. No, I think, you know, until these things are more clearly established by the federal government, which will probably be long after I'm in this job, I think you can really only count on the face-to-face conduct, the clear explanation of what you're trying to do and why to get the message across and to listen honestly to what people have to say.

I mean, people have concerns, and sometimes they're right and sometimes they're not. But I think you need to hear, you need to know and you need to be sure that you've talked with everyone who has something to say.

And once you've done that, in the end of the day, it comes to a panel like yours to judge whether any outstanding, you know, issues have been -- you know, are material or not material to the discussion.

From an industry point of view, that's what we focus on. We focus on making sure we've got the right people in the room, that they understand what we're trying to do. The capacity question's always a little bit

difficult to sort. It really depends on how far back towards basic principles you want to go.

But generally, we do reach agreement on the capacity issues and we can move forward.

I would say also there's generally small things which we don't get resolved real clearly, and those things get raised in hearings and other places to be dispositioned.

So we'll participate and we'll continue to do that.

You know, like I say, I like to see as much certainty as we can get, so the earlier we can get a clear determination of the impacts, the better off we feel it is, it's easier then for groups to put forward their arguments and we won't be getting a decision out of a hearing that says you missed something substantial, you really need to go back and rework it all.

You know, that's what we want to avoid, is just that. The fact that we may not all agree on the answer is something that we expect sometimes will occur, and in any kind of a settlement where you're reaching consensus, I think that's always a risk. And we understand that.

THE PRESIDENT: Okay. I think we need to move on.

Anybody has -- so thank you. Thank you for this presentation. Thank you.

And I think we are into the last item on the agenda, is a presentation by CNSC staff on meeting our mandate information dissemination as the CNSC as outlined in CMD 16-M7.

So I understand that Ms Locatelli will make the presentation.

CMD 16-M7

Oral presentation by CNSC staff

MS LOCATELLI: Good afternoon. My name is Sunni Locatelli, and I am the Director General of the Strategic Communications Directorate.

And I have with me today, Marc Drolet. He's a Media Relations Officer. And Aimee Rupert, Acting Chief Advisor for Strategic and Regulatory Communications, who will be sharing in the delivery of my presentation today.

My presentation today will highlight the work that the CNSC carries out in strategic communications to inform the public about our role as Canada's nuclear safety regulator.

I will describe the CNSC's mandate and

legislative requirements as it pertains to communications, its commitment to transparency, our approach to communications and the extensive communications activities we engage in as well as our regulatory requirements.

And I'll conclude the presentation with some closing comments about all the work that is done in communications and things we have heard and lessons that we have learned.

To begin my presentation, I would like to underline the CNSC's mandate as it relates to communications. It's very clear.

The *Nuclear Safety and Control Act*, the legislation that established the CNSC, specifically mandates us to disseminate objective, scientific, technical and regulatory information to the public.

As a result of this mandate, the CNSC goes to great lengths to ensure that it is being open and transparent in all of its dealings.

As you well know, Commission hearings and meetings are open to the public and are webcast live and archived on our web site for 90 days. Verbatim transcripts are posted, and all Commission decisions are all publicly available on our web site as well.

Here are some interesting numbers that underline our commitment to transparency.

In the last five years, you may be interested to note that you, as the Commission, have conducted over 80 public hearings and meetings that were advertised in newspapers, emailed to our subscribers and highlighted on our web site and social media channels.

These proceedings have resulted in over 2,600 submissions from Aboriginal groups, stakeholders and members of the public.

The Participant Funding Program, which was established to give the public, Aboriginal groups and other stakeholders the opportunity to request funding from the CNSC to participate in its regulatory processes, demonstrates the CNSC's continued commitment to meaningful public and Aboriginal participation in the nuclear review process.

Since the Participant Funding Program began in 2011, the CNSC has offered close to $1 million to help the public participate in different regulatory processes.

We also consult the public during the development of our regulatory documents. Over the years, the CNSC has received hundreds of comments from the public on regulatory documents that have been published and posted on our web site.

It is important to note that these

activities are not the sole responsibility of the Strategic Communications Directorate. They are a shared responsibility by all of CNSC staff. They demonstrate the organization's commitment to communicating with the public in a very open and transparent way.

Overall, all of our communications activities are guided by the CNSC Strategic Planning Framework, and broadly fit into four categories.

Informing, using plain language information. Engaging, by using a strong digital presence and meeting people face-to-face. Collaborating with key stakeholders to disseminate information and providing regulatory oversight of the licensees' public information and disclosure programs.

To fulfil our vision of being the most trusted source of information on nuclear safety in Canada, we use a variety of activities and resources to reach our various target audiences.

These include outreach, public and media inquiries, emergency communications, internal communications and digital presence.

With respect to outreach, in recent years, the CNSC has increased its efforts to meet Canadians in their communities and at different conferences to answer their questions on the regulation of the nuclear sector.

This ongoing dialogue is important for increasing public understanding of the CNSC's role of protecting Canadians, their health and the environment.

Last fiscal year, CNSC staff participated in over 160 outreach activities. These events included open houses as part of our early involvement in the Nuclear Waste Management Organization's process to identify a willing community to host a deep geological repository for Canada's used nuclear fuel.

We've also outreached to several people living in communities where nuclear facilities are located to inform them about our role in overseeing those facilities.

CNSC staff have also participated in community meetings and workshops with Aboriginal groups in Ontario and Saskatchewan to further explain our role and our regulations, the Participant Funding Program and Aboriginal consultation.

We've participated in 13 youth-related activities last year, ranging from participating in the Deep River's Science Academy "Research Science Live" program to larger-scale activities such as science fairs, where staff meet and interact with hundreds of youth.

We've also delivered successful presentations to high school students on nuclear energy and

safety, and we continue to search for opportunities to deliver in-classroom presentations to help students and educators connect the dots between enjoying science, pursuing a career in science and nuclear safety in general.

In 2014-15, we attended seven medical-related activities, such as the Family Medicine Forums, to provide the medical community with general information about our role, especially with respect to nuclear medicine and radiation therapy.

We've also visited 23 cities across Canada, visiting licensees using nuclear substances to inform them on CNSC's regulatory requirements.

The CNSC 101 program is another example of how we reach out to Canadians in their communities.

The program was launched in 2010, and strives to build public understanding of Canada's nuclear regulatory regime. It does so by delivering information sessions to diverse and engaged public audiences in selected locations.

During each session, participants have an opportunity to learn and ask questions about the CNSC's role as Canada's nuclear regulator.

The program continues to receive positive feedback from participants, and draws diverse representation from all major stakeholder groups, including

nuclear, non-government organizations, academia, government staff, CNSC licensees, Aboriginal groups and the general public.

Over the past three years, the CNSC has conducted 36 information sessions in 24 locations and we've talked to almost 900 people across the country to improve their understanding of how we regulate.

Another way in which we communicate with the public is through our public and media relations inquiries.

In 2015, we responded to approximately 1,600 public inquiries, which include concerned citizen questions, private companies and questions from licensees.

In terms of media relations, we responded to over 60 media calls on issues such as KI pills, nuclear waste, post-Fukushima activities and uranium mining.

Another integral part of our program is emergency communications.

We maintain emergency protocols and procedures which are regularly tested, and we train staff to be able to conduct media interviews and provide technical briefings in case of emergency.

We also have tools, such as the crisis web site, which is ready to be launched at any point in the event of a nuclear or radiological emergency.

Recent large-scale exercises have allowed us to test our capacity to coordinate with licensees as well as with agencies at the municipal, regional, provincial, federal and international levels.

And while much of our communication activities are directed to an external audience, we also go to great lengths to ensure that CNSC staff are kept well informed.

Staff are our best ambassadors at the CNSC, and keeping them informed is a top priority.

We do so using various means, including CNSC's intranet, a bi-monthly newsletter, all-staff emails, information sessions, door posters, and many more.

I will now turn the presentation over to Marc Drolet, senior media relations officer, to discuss a key communications tool, the CNSC's social media presence.

MR. DROLET: For the record, my name is Marc Drolet, and I'm the lead at the CNSC for social media activities and multi-media product development.

A key part of our organization's communications activities is to maintain a strong presence online. To do so, we use multiple tools.

The CNSC web site is the main platform to host content. Products such as news releases and backgrounders are hosted on the Government of Canada web

site, Canada.ca. This is now standard practice across government.

We maintain email distribution lists, disseminate relevant information with our stakeholders. Webinars have offered other ways for us to have conversations with the public.

For instance, last November, one of our radiation protection specialists gave two presentations to a high school science class via video conference.

On the screen here is an example of an article written by Dr. Rzentkowski, who now works at the IAEA, and that was published in a special insert for the Toronto Star.

Over the years, our social media platforms have been taking an increasing role to help us share content. We currently use Facebook, YouTube and Twitter.

On the following slide, the figures provide a general overview of a typical month for the month of October 2015, in this case, in terms of visits to the CNSC platforms.

A little more on social media, starting with Twitter, the latest addition.
It is an ideal platform for us to quickly share the latest news and updates from the CNSC and other organizations that contribute to nuclear safety, here and abroad.

For instance, communications staff use it to live Tweet Commission proceedings and provided updates about the accident in Swift Current, Saskatchewan, earlier this month.

YouTube is used to share our video content, including educational videos and Commission hearing highlights.

Facebook, which the CNSC has been using since 2012, is a platform of choice to share stories, educational resources and interesting facts on nuclear safety.

A key component for success in today's online world, and especially when it comes to social media, is to have good quality, engaging and timely content.

In terms of trends, we are seeing a move away from more traditional products, such as news releases, backgrounders and FAQs to products like infographics, interactive modules, photo essays, and social media posts that can help people connect the dots and understand the relevance of our work.

Broadly speaking, CNSC online content can be divided into four buckets.

Next slide. Yes.

The first bucket, or content area, and probably the largest in terms of volume, relates to

informing the public of activities across the regulatory life cycle. By that, I mean information on how the CNSC establishes regulatory requirements, licensing and certification, inspections and reporting.

On the left on the slide is an example of a Tweet we did to highlight the completion of clean-up activities in Swift Current. We attached pictures taken by our inspector on site.

To the right is a Facebook post highlighting the number of safety tests performed in nuclear power plants in 2014. The text that accompanies the image drives people to the annual oversight report for the power industry.

The second content area has to do with highlighting the scientific, technical and regulatory expertise of the CNSC.

On this slide is an example of a rotating banner linking to the CNSC 2014 and '15 research science report featured on our external website.

Another example, at the CNSC, staff are encouraged to publish articles in scientific, peer-reviewed journals. When staff articles are published, we post them on our website and disseminate them through our social media channels and to our 2,300 email subscribers.

Nuclear can get complicated, and it is a

priority for the CNSC to produce communication products in plain language, products that provide some context and some background information to help people understand what the CNSC actually regulates.

This type of pieces forms the third bucket. Here are two examples.

On the left, there is an image of the landing page for an interactive module we developed and that let users refurbish their own "virtual" nuclear power plant, and learn about the licensing and safety considerations involved in such a project.

On the right, you can see our colleague, Julie Burtt, who works with the radiation protection group at the CNSC.

In this video, she explains what radiation is. It is one of our most successful pieces on YouTube.

Fourthly, we create content to leverage opportunities to share information.

On the left on the slide, we have an example of a post developed for National Mining Week last year and linking to a section on our website dedicated to busting some common safety and environmental myths on uranium mining and processing activities.

To the right, we shared a media article on KI pill pre-distribution, which mentioned the CNSC.

A great advantage of today's analytics when it comes to the internet and social media is that we are able to assess the success of our initiatives on a daily basis, see how people react, and to adjust when necessary.

We also take feedback from our users to guide our approach.

In 2015, we started to use Hootsuite, a social media management platform developed in Vancouver. It is one of Canada's huge success story when it comes to social media.

The tool allows us to more easily coordinate our own activities and to keep abreast of what people are talking about online. Our team follows closely what other nuclear organizations and organizations similar to ours are doing to benchmark our activities and identify best and innovative practices.

CNSC staff recently received an award at the federal government level for our online communications efforts around the environmental monitoring program. The panel included judges from Google, and another one from Facebook.

I will now pass the microphone to my colleague, Aimee Rupert, who will address the regulatory oversight of the licensees' public information and

disclosure programs.

MS RUPERT: Thank you, Marc.

For the record, my name is Aimee Rupert, Acting Chief Advisor.

Regulatory Document RD/GD 99.3 entitled "Public Information and Disclosure" came into effect in March of 2012, and it requires licensees to inform the community in which they operate.

It applies to all uranium mines and mills, Class I facilities like power reactors, research reactors and fuel processing facilities, and some Class II facilities like pool irradiators and commercial isotope production facilities.

It is intended to ensure licensees are proactively providing information to the public about the operation of their facility as well as any out-of-ordinary events. As mentioned earlier in the meeting by President Binder, disclosure protocols were modeled after AECL actions during Chalk River Laboratory's NRU extended shutdown and repairs.

Next slide, please.

The overall principle of the program is to ensure that information related to the safety, security of the public and the environment and other issues associated with the life cycle of the nuclear facility are effectively

communicated.

Among other requirements, RD/GD 99.3 includes provisions for the identification of clear, measurable objectives and target audiences, identified appropriate communication strategy and products, and the establishment and implementation of a public disclosure protocol. And the target audiences have been consulted on it so that it meets the public's expectations and information needs.

With the creation of RD/GD 99.3, staff went to work to standardize the expectations and criteria to assess a licensee’s program. We have applied a graded approach for facilities, as you could not assess a program for a nuclear power plant the same as you would for a non-power research reactor, for example, as the associated risks and public awareness and perception are very different.

Public information and disclosure programs are assessed for licence renewal and application hearings or as needed outside of the Commission process. Assessments contribute to licensing Commission Member Documents and, since 2012, there have been 20 CMDs with contributions on public information programs.

We are also evaluating on an annual basis how licensees are delivering on the commitments made in

their programs.

Staff annual evaluations are respectively reflected in the CNSC's annual Regulatory Oversight Reports for nuclear power reactors, uranium mines and mills, uranium and nuclear substance processing facilities, research reactors and OPG's waste facilities and CNL facilities.

Also new to the CNSC's verification and oversight program are inspections focused solely on a licensee's public information and disclosure program.

It is also important to note that our verification is continuous throughout the year. For example, CNSC staff often attend licensees' public events to observe the questions, the tone, the participation and the dynamic between the licensee and the public.

It is a priority for the CNSC that Canadians are receiving information on nuclear safety not only from the regulator, but also from the nuclear facilities located in their own communities.

As well, on an ongoing basis, the CNSC holds licensees to account to provide timely and factual information on events of interest as per committed in their Public Disclosure Protocol.

At the CNSC, we have a dedicated team of communication specialists who have assessed all of the

major facilities' programs against the components of 99.3, and all are meeting requirements. And of the smaller facilities, they are well on their way to being in compliance and implementing their programs in 2016.

In developing an effective program, licensees are encouraged to take a multi-tool approach to inform and engage their target audiences.

On the screen you'll see examples of a public information session held at the Winnipeg cyclotron facility a few weeks ago, and also SRB's new Facebook page where they're informing about an emergency exercise.

On the next slide I will be highlighting the variety of tools and activities undertaken by licensees.

As mentioned before, there needs to be a blend of activities to reach target audiences, and on this slide we show the top practices that we see:

- Facility tours, and where facility tours are not possible online virtual tours are provided;

- Regular community newsletters, this is provided by OPG, Bruce Power, Canadian Nuclear Laboratories, GE Hitachi and Cameco and Areva all have regular newsletters;

- Open houses and virtual town halls, almost all use this activity, and Bruce Power has been very

successful with their telephone town halls;

- Informative websites and social media channels are just essential tools;

- Various types of public opinion surveys are undertaken by the majority of the facilities;

- Regular updates to the local municipality are often undertaken and community advisory committees have been established by the Port Hope Area Initiative, GE Hitachi, Canadian Nuclear Laboratories and Ontario Power Generation;

- Interactive information centres, or sometimes referred to as visitor centres, are provided at the Pickering, Darlington and Bruce sites;

- And, finally, many licensees are involved in community events.

This concludes the overview of licensees' public information and disclosure programs, and I will now turn the presentation back to Ms Locatelli.

MS LOCATELLI: So what would we like you to take away from this presentation?

What our communication activities have taught us is the importance of ongoing communication of our regulatory role in ensuring safety; the sharing of timely information is crucial; proactive disclosure and transparency are highly valued and foster public trust;

informing the public is a joint responsibility between the regulator, the industry and all levels of government, and the public values the opportunity to speak with CNSC staff; digital communications should continuously adapt to the latest new trends; and communications is a team effort here at the CNSC, where everyone is involved.

We have staff available here from across the organization to respond to your questions.

THE PRESIDENT: Thank you.

So let's jump into questions with Ms Velshi.

MEMBER VELSHI: Thank you, Mr. President.

And thank you for the presentation.

I'll start off with: so how do you know you're doing a good job? If you look at particularly your last slide, how do you get objective evidence on how well you're doing and where there are opportunities to even get better?

MS LOCATELLI: I may turn this question over -- Sunni Locatelli, for the record -- to Mr. Drolet with respect to the social media. As he indicated, there are really valuable metrics that are offered through social media channels, and through web analytics as well, which help us track what people are saying, what they're thinking. We do also monitor public enquiries. And what

kind of issues are arising in the media, that also help us evaluate.

But I'll maybe ask Mr. Drolet to respond from a social media perspective.

MR. DROLET: That's a good -- sorry, Marc Drolet pour le verbatim.

That's a good start. So three -- I would say three main points.

In terms of qualitative data, we look at feedback, feedback, obviously, through social media, public inquiries, but also received from face-to-face interactions when staff goes to the many outreach activities to which they participate.

The second component would be in terms of more quantitative, so we would look, for instance, in terms of analytics, at the number of visitors, the number of views of our posts, but also at the level of engagement, so whether people are sharing our content, liking it or commenting.

And the third aspect I would say is benchmarking, so looking at how other organizations like ours are doing. So, for instance, if you look at YouTube channels -- and we looked recently at the number of subscribers looking at the main players, if you wish, like the U.S. NRC, the IAEA and the Japanese regulator -- we

have about the same number of subscribers as them, so it's -- that was an indication for us of how we are doing.

And when we do the benchmarking, we try to look for the best practices, not only with nuclear organizations, but from other types of organizations, such as the NEB or...

MEMBER VELSHI: Thank you.

You know, sometimes we hear that the CNSC could be more transparent or staff -- there's some question around trust perhaps or -- and these may just be isolated events, not sure, but how trusted a source of information the CNSC is. I don't know if you ever thought of doing any opinion surveys, but besides the social media, because the analytics there it lends itself to that, the softer areas on public engagement, and how involved they are even in the hearings or the meeting process, how do you really assess that? And maybe start off with opinion surveys, and whether you've considered doing those, to get some insight into that.

MS LOCATELLI: As you may or may not -- Sunni Locatelli for the record -- there are certain restrictions with public opinion research within the federal government, particularly, for example, in an election year. So what we've done is we've tried to find different mechanisms to monitor.

Licensees do public information research. We do monitor that. Other federal governments, where they mention nuclear, we do monitor those. We also are considering public opinion from a more -- as you say, a softer approach. We've initiated some programs where we're doing outreach, and we've asked the public to complete a form to provide us with their feedback on whether the outreach was effective, did they learn the things they expected to learn from the CNSC. And we will soon be launching a similar program on our website, where you do an online survey or through social media channels as well.

THE PRESIDENT: On that point, I think there may be an opportunity, and again I'm guessing. As the government tries to come up with climate change and all the mix there may be an opportunity to get a national poll as to all the mix. I don't know who would conduct such a thing, whether it's going to be Environment or NRCan, but we may want to keep an eye open to see whether we can piggyback.

Because all the data that I see here, it's very small, and it's, as I like to call it, the nuclear bubble. It's not mainstream. I'd like to hear what mainstream thinks about nuclear and we don't -- we rarely get that kind of information.

Am I right?

MS LOCATELLI: I agree. We're monitoring what the new government will do. We're watching the new communications policy for the Government of Canada to see if there are certain, you know, restrictions lifted. But also I have been in touch with my colleagues around town, Environment Canada, Natural Resources Canada, always indicating that if there is a nuclear type of survey going out we would be very happy to add a question or two onto it.

THE PRESIDENT: Mr. Harvey?

MEMBER HARVEY: It's almost the same question, but from another angle.

On page 20, the second bullet:

> "Ensure that information is commensurate with the public's perception of risk and the level of public interest..."

How do you do that, keeping in mind that one could see that is just promoting nuclear, which might not be exactly our role. Because it's very delicate to inform the population, and being seen like a promoter of nuclear in Canada, which has to do with independence of the Commission towards the licensees and the mining sector, et cetera.

MS LOCATELLI: Sunni Locatelli, for the

record.

So, as indicated, there is a certain onus of responsibility on the licensees to also disseminate information about levels of risk with respect to their specific facilities. What we really do at the CNSC, obviously, is focus on nuclear safety. We demystify nuclear science. We describe our role. We ensure the public knows CNSC as a credible source of information. Those are our, really, focus areas for our communications and our outreach.

MEMBER HARVEY: Do you have some discussions inside just to be certain that we are within our mandate and not being seen, like I was saying, that we are promoting nuclear in Canada, so -- which, to my point of view, could interfere with our independence.

MS LOCATELLI: Sunni Locatelli, for the record.

Absolutely. That's our mantra. We always, always make it very clear that we are Canada's independent nuclear regulator and we report to parliament through Natural Resources Canada. We make it quite clear that our job is safety. We would not license it if it was not safe. That's our main priority and goal, and our common set of objectives, and those discussions happen every day before we release communications products to the

public.

MEMBER HARVEY: Merci.

THE PRESIDENT: Mr. Tolgyesi.

MEMBRE TOLGYESI : Merci, Monsieur le Président.

Have you compared with the communications program in the presence with the public at the CNSC and other Canadian regulators? Are they much more present? Are we much more involved in education or the regulatory side?

MS LOCATELLI: Sunni Locatelli, for the record.

We do benchmark ourselves against other Canadian regulators, NEB, for example. Our benchmarking evaluations put us on a par with other regulators. I mean we obviously -- as the president indicated earlier, we do have a very specific audience on nuclear. But as far as -- maybe I'll ask Mr. Drolet to provide some details on our social media activity, for example, but we're doing quite well from a social media perspective. We have quite a good number of followers, given our activities and given the role that we play within the nuclear sector.

I don't know if Mr. Drolet has anything to add.

MR. DROLET: Marc Drolet, for the record.

So if it is any indication, the Community of Federal Regulators did invite us last fall to come and talk to us because they recognized that the CNSC was making a good effort to try to communicate in innovative ways through social media and other means. That's what I would say.

MEMBER TOLGYESI: And, you know, when you are looking at the audience, I think it's quite important to inform the young generation, high school students.

Do you have a program where you are going to the schools, for instance, and you are invited or you offer to come or you pass -- there is one good way to pass the message also is through the Science Teachers' Association. I think that they have annual meetings, et cetera, and they have presentations, and they will disseminate also your -- you know transmit your messages.

MS LOCATELLI: Thank you for the question.

The youth have actually been one of our key targeted audiences in our outreach campaign over the last couple of years and we've had some really successful presentations at Science Teachers' Association conferences in different provinces.

I'll turn the microphone over to Madame Dominique Morrissette to answer that question in a little bit more detail.

MS MORRISSETTE: Dominique Morrissette, for the record.

As Ms Locatelli just mentioned, youth is one of our target audiences, and we do reach out to this target audience by reaching out to the science teachers. So we do participate in science teachers' forums, and at these forums we showcase our educational tools. They're free and they're bilingual.

So just to give you an example, we went to the Science Teachers' of Ontario Association's conference last November and we showcased some of our tools to the science teachers and we brought some career profiles -- this was a new product that we wanted to show them -- and they were quite pleased to see all those free resources.

And we do develop these products to help teachers teach nuclear science in the classroom. What we've heard from science teachers is that often they don't have the level of comfort to teach nuclear science, and by providing these tools it does help to teach nuclear science.

THE PRESIDENT: Dr. McEwan?

MEMBER McEWAN: Thank you, Mr. President.

A couple of very simple questions.

How many peer-reviewed publications came out of CNSC staff last year?

MS LOCATELLI: Sunni Locatelli, for the record.

I'd have to check. I know that we -- and they are peer reviewed. And particularly when they are published in journals, we do push them out on our website to all of our subscribers and posts, but I would have to check on the actual number. I don't have that off the top of my head.

MEMBER McEWAN: So if I wanted to go in January 2016 and find on the website all of the publications for our scientists in 2015, would it be easy?

MS LOCATELLI: Sunni Locatelli, for the record.

I would say yes because we do have -- under our latest news we do post anything current. Then we also have a special section, it was just developed about -- actually, about a month ago, and it's a science and technology section where all of our reports and -- technical reports and journals are listed.

MEMBER McEWAN: Okay, because I couldn't find it.

MS LOCATELLI: I hope that we would have addressed that issue under the new website, which was just launched, but I'll make sure that they are high profile, high visibility.

MEMBER McEWAN: Okay.

THE PRESIDENT: Did you use Google?

MEMBER McEWAN: No.

--- Laughter / Rires

THE PRESIDENT: Because we have a Google function in there and I'm told it's working pretty well, so I'd be surprised. But I don't know if it'll -- if it's easy to search. I don't know what you use as a search.

MEMBER McEWAN: I mean I think it would be nice if we could review on a cumulative basis the publications that come out from our scientists, and that they're in one library, if you like.

THE PRESIDENT: We have a science annual report. We have the Director of Evaluation here, who looks after R and D. I wonder if Mr. Dewer can tell us.

Do you keep in your list all the -- is it a list of all the research that we fund or is it a list of everything science that we do?

MR. DEWAR: Keith Dewar, Director of Research, for the record.

Yes, sir, we do. In fact, we split into two categories. There's research we contract ourselves, and all the research we've contracted ourselves is available on our website. But also all the scientific papers and publications that our staff has produced are

also available via that means as well.

THE PRESIDENT: So if Dr. McEwan went and found this annual report, he'll find the last year publications?

MR. DEWAR: Yes, he will, sir.

THE PRESIDENT: Okay.

MEMBER McEWAN: The second question -- and this is, again, a personal thought -- when there's requirement for Class 2 facilities to have their public information session, I know an awful lot of universities and hospitals that went cross-eyed. They had a great deal of difficulty in understanding what was meant and in understanding what was wanted.

Have you created a guidance package for them so that there is a coherent approach and one which would be recognizable across the country?

MS RUPERT: Aimee Rupert, for the record.

When the Class 2 facilities were identified of needing to adhere to 99.3, yes, official correspondence was sent out to the facilities to clearly demonstrate the expectations. Conversations began one on one with a lot of the facilities with our communications advisors, the project officers and the staff who would be responsible for developing them, and they're in good shape. They're coming along quite nicely.

THE PRESIDENT: I see some movement in the back here to support you on this. Go ahead.

MR. MOSES: Colin Moses, the Director General of Nuclear Substances Regulation. I'll let Kavita Murthy, the Director of the Accelerators in Class 2 Facilities Division add some context, but certainly I think you're right, Dr. McEwan, there was a lot of back and forth and a lot of clarification that we needed to do as a regulator on exactly what we're looking for when we're talking about a proactive disclosure and public information program, and we did develop specific targeted guidance material to provide to those licensees to help them move forward with implementing that program.

We have had discussions on sort of the next iteration of this REGDOC, and that's one of the aspects that we're looking at actually integrating directly into the REGDOC to give that more enhanced guidance.

THE PRESIDENT: Can I piggy back on this?

So here is where maybe I'm confused. So there is public information disclosure, there's a regulatory requirement and there is proactive disclosure. I assume they're all related somewhere along the line. But there's also -- some of those hospitals and universities are a resource that I don't think we're utilizing to the full extent for dissemination of scientific information.

So I think we should require Dr. McEwan to go and give a lecture now and then to the local community about nuclear medicine and isotopes and all of this. He lives in Alberta. He can actually be empowered to do this. I don't know if it's a regulatory requirement. Maybe. And maybe, knowing him, he'll be in conflict.

--- Laughter / Rires

THE PRESIDENT: But somebody should do this, not as a regulatory requirement, but fulfilling our other mandate, which is disseminating scientific and regulatory information. So they are not regulatory-derived, they are a different basis, different licensing. Not even licensing a different mandate, legislative mandate, for our organization to try to get some of this information out in the public.

Are we doing anything along those lines?

MS LOCATELLI: Sunni Locatelli, for the record.

I'll have Ms Morrissette explain some of the recent outreach we've done in the medical community. It is one of our target audiences and we've had some very successful presentations at some conferences -- kiosks at some conferences, where the medical community participates, and the doctors and medical community has been very, very pleased with some of the material we've been able to

provide.

Perhaps there's some more information from Ms Morrissette.

MS MORRISSETTE: Dominique Morrissette, for the record.

So we do reach out to the medical community be participating in medical conferences. We started to do that in 2014 and '15 to just start a discussion to see what type of products we could develop to help family physicians have a discussion with their patients on radiation. And from our discussions with family physicians there was a gap where it was hard for them to find information to give to their patients to help them understand radiation, ionizing radiation.

Based on our discussions, we've developed a product. It's an infographic explaining the different doses, providing examples of the different doses. We showcased this infographic at a recent conference that we attended back in November of this year, the Family Medicine Forum, and that infographic was quite welcomed.

This is the type of information that family physicians are looking for, so we do reach out to the family physician -- the medical community to just see how we can disseminate information to them.

MEMBER McEWAN: Could I get a copy of

that, please?

MS MORRISSETTE: For sure.

MEMBER McEWAN: Thank you.

THE PRESIDENT: I think I'd strongly encourage that because all the doctors and all the radiation and medical science, they're very busy people. You can well imagine. This would be an extracurricular activity, so you'll want to provide them with either something they can share or a canned presentation, something they can use without spending a lot of time developing it themselves.

We've got to get -- because even in their treatment of CT scans and some other procedures, there's misinformation about how many you should take, the cumulative effect and all that stuff, and it requires some outreach, I would argue.

Go ahead.

MS MURTHY: Kavita Murthy, for the record.

Yes, there is an aspect of public outreach that isn't happening, mostly at a clinic level, where just last month the medical physics community celebrated Medical Physics Day on the birthday of Madam Currie. As a part of those activities, they do speak about the work they do and radiation. I'm not sure that they address specifically the safety aspects of it, but the community at large is

recognizing the need for them to speak out and speak up about the work they do.

THE PRESIDENT: Okay.

Ms Velshi?

MEMBER VELSHI: No.

THE PRESIDENT: Monsieur Harvey?

Mr. Tolgyesi?

MEMBER TOLGYESI: I have one.

When you look and you do this public relations and dissemination, is there a threshold or a level or a good balance between the regulatory responsibilities and dissemination of technical and scientific knowledge where we are seen as a regulator and not as a promoter of nuclear? Is there a risk?

MS LOCATELLI: Sunni Locatelli, for the record.

I think that, as indicated earlier, we strive to ensure that all of our communications is nuclear safety related, and we very much go out of our way to ensure that there's no promotion. That's other people's jobs, licensees' job, the CNA's job, not our job.

THE PRESIDENT: Anybody?

Well, yes, I just -- on Slide 4, your number, you know, 80 hearings, this is over five years? I didn't understand the metrics.

MS LOCATELLI: That's over the five-year period. That doesn't include -- we did not include the JRP. We were focusing on this Commission tribunal specifically.

THE PRESIDENT: No, I know, but you should say on the slide "five years." You didn't give the time horizon.

And on your good practices, on Slide 23, I hope you're sharing this amongst all the communities and pointing where good stuff is being done so people don't have to reinvent the wheel.

MS RUPERT: No absolutely -- Aimee Rupert, for the record -- when we do our assessments, we do share best practices with the licensees where we feel there are gaps and where they could improve.

THE PRESIDENT: Okay. Anything else?

Well, thank you. Thank you very much.

This concludes the public meeting of the Commission. Thank you for your participation.

THE SECRETARY: If you have borrowed interpretation devices, please remember to return them at the reception and claim your identification card.

Thank you. Bonne fin du journée.

--- Whereupon the hearing concluded at 4:02 p.m. /

L'audience s'est terminée à 16 h 02