

Canadian Nuclear
Safety Commission

Commission canadienne de
sûreté nucléaire

Public hearing

Audience publique

May 9th, 2017

Le 9 mai 2017

Delta Hotels Saint John
Ballrooms A & B
39 King St.
Saint John, New Brunswick

Hôtel Delta Saint John
Salles de bal A et B
39, rue King
Saint John (Nouveau-Brunswick)

Commission Members present

Commissaires présents

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

M. Michael Binder
D^r Sandy McEwan
M^{me} Rumina Velshi
M. Dan Tolgyesi

Secretary:

Secrétaire:

Mr. Marc Leblanc

M. Marc Leblanc

General Counsel:

Avocate générale :

Ms Lisa Thiele

M^e Lisa Thiele

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Saint John, N.B. / Saint-Jean (N.-B.)

--- Upon commencing on Tuesday, May 9, 2017
at 10:08 a.m. / L'audience publique débute le
mardi 9 mai 2017 à 10 h 08

Opening Remarks

M. LEBLANC : Merci. Thank you. So we will go through our spiel again because I think we have some new people in the room.

Bonjour, Mesdames et Messieurs. Bienvenue cette fois-ci à l'audience publique de la Commission canadienne de sûreté nucléaire.

The Canadian Nuclear Safety Commission is about to conduct Part 2 of a public hearing on the application by NB Power for the renewal of the Power Reactor Operating licence for the Point Lepreau Generating Station.

During today's business, we have simultaneous translation -- or interpretation, I should say.

Des appareils d'interprétation sont disponibles à la réception. La version française est au poste 2 and the English version is on channel 1.

We would ask that you keep the pace of

your speech relatively slow so that the interpreters have a chance to keep up.

I would also like to note that this proceeding is being video webcast live and that the proceeding is also archived on our website for a three-month period after the close of the hearing.

Les transcriptions seront disponibles sur le site Web de la Commission dans environ deux semaines.

To make the transcripts as meaningful as possible, we would ask everyone to identify themselves before speaking.

And as a courtesy to others in the room, please silence your cell phones and other electronic devices.

Monsieur Binder, président et premier dirigeant de la CCSN, présidera l'audience publique d'aujourd'hui.

Mr. President...?

LE PRÉSIDENT : Merci, Marc.

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

Mon nom est Michael Binder. Je suis le président de la Commission canadienne de sûreté nucléaire.

Je souhaite la bienvenue aux gens ici présents, and welcome to all of you who are joining us via

our webcast.

First of all, let me repeat what I said at the meeting, that we are delighted to be here and out of Ottawa and happy that the terrible floods did not stop this hearing, and I hope that we will overcome that natural disaster.

I would like to take the opportunity also to thank the hotel staff who have been very nice and accommodating to us and set up this facility. I think we may need some bigger facilities in the future, it looks like.

I would like to begin by introducing the Members of the Commission that are with us today.

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

And we have heard from -- I guess here is where I have to explain what happened here. We changed Members at the podium because, according to our rules, those who heard Part 1 must hear Part 2, and the new Commissioners that have been appointed recently did not participate in Part 1, so that's why they are not here, even though they are observing us, I think.

So let me go back to -- you have heard from our Secretary of the Commission Monsieur Marc Leblanc. We also have with us here today Ms Lisa Thiele, Senior

General Counsel of the Commission.

I would like to start by calling for the adoption of the agenda by the Commission Members, as outlined in CMD or Commission Member Document 17-H6.A.

CMD 17-H6.A

Adoption of Agenda

THE PRESIDENT: Do we have concurrence?
For the record, the agenda is adopted.

The hearing today is to consider the application of New Brunswick Power Corporation (NB Power) for a five-year renewal of its Nuclear Power Reactor Operating Licence for the Point Lepreau Nuclear Generating Station.

Marc? I would like to start this hearing with a few additional introductory remarks. We are in Saint John the next three days to consider the written submission and all presentations from a large number of citizens and organizations who wish to express their opinions in the context of the Energy New Brunswick Point Lepreau Nuclear Generating Station renewal hearing. Sorry, mouthful here.

I would like to clarify a few things prior to getting this hearing under way.

I wish to emphasize that the Commission is a quasi-judicial administrative tribunal and that, consequently, it is independent from any political, governmental or private sector influence.

In fact, each Commission member is independent of one another and also independent of the CNSC staff.

Interventions filed for this hearing include recommendations to the Commission. CNSC staff also make recommendations to the Commission but it is the Commission members who will render a decision based on all evidence presented in the context of the hearing process.

The Commission members are appointed by the governing counsel on the basis of their achievements in their respective fields of endeavour as well as their excellent reputation among their peers.

Their mandate is simple. Ensure that the use of nuclear is done in a manner that protects the environment as well as the health, safety and security of the workers and the public.

I will also like to emphasize that the CNSC has no economic mandate and will not base its decision the economic impact of a facility.

I will repeat it. It is the health, safety and security of the public and the protection of the

environment that guides its decisions.

Finally, as I stated earlier, the Commission is an administrative tribunal. It is willing to conduct this hearing in the affected communities and to provide the forum where members of the public can express their view on the matter at hand.

As the Commission is a tribunal and wishes to hear all oral presentations and ask as many questions as it deems necessary on these issues, we ask that everyone respects that the quorum of a tribunal setting and assists with the orderly, civil and respectful conduct of these proceedings.

The Commission will not tolerate inappropriate behaviour and will take measures necessary to ensure the orderly conduct of this proceeding in the same way it does for all other proceedings it conducts in Ottawa and in the community. Thank you.

MR. LEBLANC: Just a few additional remarks, that this is Part 2 of the public hearing. The first part of the public hearing on this application was held in Ottawa on January 26, 2017. The Notice of Public Hearing and Participant Funding 2017-H-02 was published on September 9, 2016 and a revised notice was published on April 5th to add May 9th to the agenda and also announce the location of the hearing.

Presentations were made on Part 1 of the hearing by the applicant, NB Power, under Commission Member Documents, what we refer to as CMDs 17-H2.1 and 17-H2.1A, and by Commission staff under CMD 17-H2 and 17-H2.A.

These documents are available on demand at the reception.

The public was invited to participate, either by oral presentation or written submission. March 27th was the deadline set for filing by intervenors. The Commission received 94 requests for intervention and all 94 requests were permitted.

I should note that one submission was withdrawn from the agenda on May 4th and we'll address this as we get to that particular submission.

April 26th was the deadline for filing of supplementary information and I note that supplementary submissions and presentations have been filed by staff, CNSC staff, NB Power, as well as several intervenors.

Participant funding was available to intervenors to prepare for and participate in Hearing Part Two. Six groups are receiving funding. The funding decision is available on the CNSC Web site.

All documents are available at the reception, as I indicated earlier, either on CDs, because they're quite voluminous, or in paper format.

We will today, just to give you a sense of how things will proceed, we will first hear the presentations from NB Power and CNSC staff. After that, we will break for lunch or we'll proceed with the initial intervener, depending where we're at by noon.

So certainly we'll not go beyond 12:30 in terms of lunchtime, maybe earlier, should we get there.

There will also be an afternoon break and there will also be a break of an hour for dinner around 5:30 pm. This is the only evening that the Commission has planned to have some -- to continue its hearing. We should finish in the, well, normal times in the further two days.

I should be very careful. Time permitting, the Commission will also review written submissions at the end of each day. These written submissions have already been read by the members and we will address each of them before the close of this hearing.

Thirty-eight (38) intervenors are scheduled to present orally. While the presentations are limited to 10 minutes, Commission members will have the opportunity to ask questions after each presentation. No time limit has been ascribed for the question period.

You've noted we have a clock that will assist in respecting that time period.

Your key contact persons for the hearing

will be Ms. Louise Levert and Ms. Johanne Villeneuve from the Secretariat staff and you'll see them going around or at the back of the room if you need information regarding the timing of presentations, availability of documents, et cetera. Thank you. Mr. President?

THE PRESIDENT: Merci, Marc. Before we proceed with the presentation, I would like to note that there are representatives from other government departments joining us for this hearing and they are available to answer questions after the presentations.

So, attendance today, we have representatives from New Brunswick Emergency Measures Office, Mr. Greg MacCallum and Mr. Roger Shepard, I assume you are here. Thank you.

And we have Ms Paulette Hall from Fisheries and Oceans. Thank you.

And we also have in attendance representatives from Environment Canada and Climate Change, Ms Nardia Ali and Mr. Duck Kim. So you're here? So thank you for making yourselves available.

Tomorrow there will be some representatives from Health Canada and Natural Resources Canada, also.

So let's now turn the floor to NB Power for their presentation, as outlined in CMD 17-H2.1C.

I understand that Mr. Plummer will make the presentation. Over to you, sir.

CMD 17-H2.1C

Presentation by NB Power

MR. PLUMMER: Good morning, President Binder and members of the Commission.

For the record, my name is Brett Plummer, New Brunswick Power's Vice-president of Nuclear and Chief Nuclear Officer.

I have the overall responsibility for ensuring our nuclear power plant is operated to the highest standards and its safety remains our number one priority.

We are joined today by Mark Power, Station Manager; Glenn Round, Director of Engineering and Chief Nuclear Engineer; Jason Nouwens, Director of Regulatory Affairs & Community Affairs and Performance Improvement; Kathleen Duguay, Manager of Community Affairs, Nuclear Regulatory Protocol; Paul Thompson, Senior Strategic Advisor; Charles Hickman, Director of Environment & Emergency Planning; and Rick Gauthier, Manager of Regulatory Affairs as well as other members of our senior management team.

We are here because the Commission today

in support of NB Power's request to renew a licence for Point Lepreau Nuclear Generating Station, which expires on June 30th, 2017.

We have requested a renewed licence term of five years until June, 2022.

Our presentation will follow the outline shown on the slide.

Safety is our overriding priority. We would first like to recognize the importance the public continues to place on the safe operation of our nuclear power plant.

The importance of safety as our overriding priority comes through loud and clear in interventions, public information sessions, and in our community relations liaison meetings.

We want to assure the Commission and the public that we share that priority. We know that we are entrusted to protect the public from risks associated with the operation of a nuclear power plant.

We insist the safe operations underpins everything we do at our station. We constantly stress the importance of safety in our performance.

We are proud of our safety record and work hard to maintain safe work environment at Point Lepreau. Our conventional safety performance remains strong.

We recently achieved six million person hours without a lost time accident.

Although we're pleased with that achievement, we will continue to focus on improving safety and demonstrating that nuclear safety, radiological safety, conventional, personal safety and environmental safety are our top priorities.

Total radiation dose to the public over 30 years of operation is less than half of a single chest x-ray. Our public radiation dose each year continues to be less than one percent of the regulatory limits.

Nuclear safety is paramount to all of us at Point Lepreau. Our assessments have demonstrated the plant is a robust design, sufficient barriers are in place to protect the public, environment, and our plant personnel.

Opportunities for enhancement to our plant design operations, maintenance practices and procedures, standards and guidelines. We periodically evaluate our own nuclear safety culture to recognize positive attributes and to identify areas positive attributes and to identify areas for further improvement. The most recent evaluation concluded there is a healthy nuclear safety culture at the station.

Our nuclear management system is our

quality program, it provides a framework that establishes a framework that establishes the process and procedures require to ensure NB Power achieves safe, predictable and reliable operation. This management system allows us to continuously assess, maintain, and improve our operations, also fosters a healthy safety culture. With robust procedures in place to ensure activities to operate and maintain a station are conducted to the highest standards, we are focusing on enhancing our process rigour as we continually strive for excellence, and that is our goal.

We are proud of our environmental performance and stewardship. The station's environmental performance has been reviewed many times, either in formal environmental assessments or through ecological and human health risk assessments. Each review has confirmed the station continues to have a minimal environmental impact.

This is confirmed and monitored through various environmental processes captured in the station's comprehensive environmental management system, certified to ISO 14001 Standard, the environmental management system is linked with other station processes to ensure all requirements are met.

Recent work has included a two-year study on the effects of the cooling water system on fish. The results submitted to the CNSC confirm the original

predictions that the station is having a minimal impact on fish populations.

Consistent with the new *Fisheries Act*, NB Power will apply for a *Fisheries Act* authorization in the fall of 2017.

In the spirit of continuous improvement, upcoming work will include additional validation studies of a thermal plume associated with the cooling water system. These validations will use new technologies to allow an updated assessment of thermal plume.

In the first 25 years of station operation the power generated from Point Lepreau has avoided approximately 90 million tons of CO₂ emissions, which is equivalent to the emissions of approximately 19 million vehicles.

For future years of operation we will avoid the emissions equivalent of approximately one million cars per year. As such, we have and will continue to play an important part of the provincial climate change action plan, providing clean, non-emitting electricity for the Province of New Brunswick.

As a follow-up to discussions during Part 1 hearing, NB Power has reviewed the environmental risk assessment, (ERA), and available information on the iron concentrations in groundwater. We have verified that the elevated iron levels noted in the ERA are not attributable

to station activities. This is based on the fact there is both pre-operational and regional data showing iron concentrations are naturally elevated at levels consistent to those seen in our monitoring. This additional information will be incorporated into the next ERA.

This graph illustrates our performance for the current licence period in terms of electrical output and megawatts electric from 2013 to 2017. The orange shows at-power periods, with the white showing planned and unplanned outages.

Although we've had challenges in the past, we've seen great improvement in the performance of the station. We continue to strive for excellence and we are seeing the results of our work and our commitment to safe, predictable, reliable operation.

Over the last year and a half from one planned outage to another planned outage we operated 266 days out of 269. We're only down three days.

Emergency preparedness. Consistent with the nuclear industry's strong focus on emergency preparedness, NB Power has continued to make improvements to accident response and emergency planning. Our emergency planning activities take a comprehensive approach, we've built a strong relationship with the NB EMO, New Brunswick Emergency Management Organization, and their warning system

and ensure our planning basis reflects highly unlikely severe accidents and industry guidance.

In addition, also ensure that our business planning activities support continued improvement. The resultant emergency and evacuation plans are well developed. They ensure a strong and safe response to potential events and are of great importance to everyone who lives near the plant, including our own staff and their families and many whom, including myself, live in the Point Lepreau region.

NB Power and the Emergency Response Organization exercise these plans regularly, ensuring the plans and the overall responses are updated and improved based on these exercises, as well as taking into account evaluations by observers, including the CNSC.

An example of this is the Intrepid Exercise which we organized and completed in 2015 where more than 1,500 participants from over 30 federal, provincial, municipal government agencies and non-government agencies participated over the course of two days. This incorporated the evacuation of a number of volunteers from the local community, including their pets.

This provided an opportunity for feedback from volunteers as well as hands-on learning for them. The results demonstrated that there are robust emergency plans

in place at all levels to deal with nuclear emergency, and this exercise successfully met all objectives.

We reported to the Commission about this before and we thought the broader public would be interested in the exercise. We have a video we'd like to show you now, which is also available on our website.

--- Video presentation / Présentation vidéo

"Emergencies can happen anywhere and at anytime. They vary in type, in size and, most importantly, they vary in the overall impact they can have on people and the environment. Now, more than ever, Canadians are aware of the importance of being prepared and planning ahead for these events whenever possible.

For some emergencies like floods and forest fires that are more predictable, government organizations have plans in place to better prepare for and respond to these events. These plans reassure Canadians that their government is prepared to deal with the more common emergencies that could

threaten public safety.

But what about emergencies that are less common? How do we prepare for unpredictable or even highly improbable events like a nuclear emergency? Even though the likelihood of a nuclear emergency occurring in Canada is extremely remote, planning and preparation for just such an emergency is conducted in much the same manner as for a flood or a forest fire.

In those provinces with nuclear power plants each level of government has its own well-developed and detailed plans, and the capability to protect the residents during a nuclear emergency. For the utilities operating a nuclear power plant the Canadian Nuclear Safety Commission requires these emergency plans as part of the plant's licence to operate.

New Brunswick Power has always

maintained the safety of the Point Lepreau Generating Station by ensuring the latest safety systems and equipment are in place and by updating emergency response plans and procedures on a regular basis.

In order to clearly demonstrate a response capability plans need to be rigorously tested, especially when an emergency engages many organizations. At NB Power regular drills and exercises are conducted with the province to test key elements of their plans. These drills are designed to examine select areas of response that are unique to a nuclear emergency, like the activation of monitoring and decontamination centres and evacuation of the public in affected areas.

However, in order to fully test the robustness of these plans and measure New Brunswick's ability to respond to a nuclear emergency,

something more complex and integrated was needed. A large full-scale realistic exercise was the best way to thoroughly test and challenge the strength of response plans in their entirety, one that would engage organizations at every level; from the operator through each level of government.

Exercise Intrepid 2015 was a two-day NB Power sponsored exercise held in November 2015 and involved simulated incidents at the Point Lepreau Generating Station. The goals of this exercise were to test and demonstrate the ability of all participating organizations to work together effectively in responding to a nuclear emergency in order to identify areas where their plans and procedures could be improved.

The last layer of defence is emergency preparedness. So our interest is to see that the operator, New Brunswick Power, can

interface with all of their partners, the stakeholders, to ensure that there can be a seamless and very effective response to protect the public during a nuclear emergency.

In total, 30 organizations and over 1,500 people from every level of government participated in the exercise.

Developing a realistic exercise of this size and scope was a complex and detailed process that took more than 12 months of hard work and dedicated planning. To achieve this, an exercise design team was assembled, which included representatives from the key organizations with a role in nuclear emergency response.

An outside group was brought in to manage and coordinate the exercise as well as to setup a virtual site for much of the simulation. To ensure a common

understanding of goals and objectives, this design team participated in monthly meetings, major planning conferences, specialized workshops and preparatory exercises throughout each stage of exercise development.

The exercise design team was responsible for creating an environment that was as realistic as possible, and one that would engage all of the organizations that would be involved in a response to a nuclear emergency.

There's many, many organizations involved in such an exercise. It's not simply the province. We're supported by federal departments, we're supported at the local level by first responders. Municipalities have a stake in this as well. So our function is really coordination of all the diverse elements that come to play in effecting an orderly and effective response.

One of the challenges organizations often face is a limited window to carry out the response functions. To overcome this artificiality Exercise INTREPID 2015 was conducted over two extended days which made it possible for many participants to test specific elements of the response to a nuclear emergency.

The scenario began on Day One with a situation at the Point Lepreau Generating Station that was complicated by a loss of power and a severe weather event. Notifications to external agencies were made in accordance with stations onsite response procedures.

For the duration of the first day the problem was contained at the plant which allowed NB Power to fully test their onsite plants. This included the opportunity to deploy and operate their emergency mitigation equipment. Medical

personnel were also tested at the plant in their handling and treatment of the contaminated casualty that required transport to the Saint John Regional Hospital. Meanwhile regional, provincial and federal organizations took precautionary measures to keep the public safe in the event that the situation worsened.

The Province was able to test their emergency notification system and alerted residents living within 20 kilometres of the plant of the developing situation. As part of the protective actions the Province with the support of NB Power also set up a monitoring and decontamination centre in the event that an evacuation were to be ordered. Many organizations were also on standby to coordinate and set up reception centres and animal shelters that would receive evacuees and their pets.

At the end of the first day NB Power was dealing with emergency onsite and the Province was ready and positioned to quickly respond if the situation deteriorated.

On Day Two of the exercise, organizations arrived at the emergency operation centres to learn that the situation at the plant did in fact worsen through the night. The Province and the CNSC were informed that there would be a release of radioactive material to the environment within 12 hours.

The local residents within the 20-kilometre zone will be evacuated as well as the local school. You will not be allowed into the area. We have traffic control points that are set up coming out west out of Saint John, east out of St. Stephen. Highway 1 is shutdown at Penfield and Prince of Wales. People will not be getting any further east or west from those points.

After analyzing the simulated events and the possible impact on the public, the New Brunswick Minister of Public Safety declared a state of emergency and an evacuation of all residents living within 20 kilometres of the station was ordered. Residents were notified of the order and followed the instructions that were provided by the wardens. More than 100 residents living in the affected area volunteered to participate in the exercise as an evacuee. Two reception centres were set up.

Emergency social services were offered to arriving evacuees allowing the Canadian Red Cross to fully test the operations of each reception centre, including the provision of food, lodging and medical assistance. At the same time, the disaster animal response team mobilized their personnel and equipment to accommodate displaced

pets arriving with their evacuated owners at the reception centre.

As would be expected during a real nuclear emergency, area hospitals would likely receive a high volume of worry while concerned about their health and radiological contamination.

During Exercise INTREPID the Saint John Regional Hospital was well equipped to manage the influx of people by setting up their decontamination tent in the ambulance bay. This allowed medical staff to quickly screen people for contamination and provide reassurance to members of the public that there were no health risks present.

Meanwhile, the federal government was enacting the response plans and ensuring technical supports provided to the province in a coordinated and timely manner. Throughout the entire exercise the

federal nuclear emergency plan technical assessment group was providing valuable data to the provincial emergency operations centre for the purpose of decision-making to protect the safety of the public.

By the end of Day Two, organizations were tasked with managing the response to an ongoing release that continued right to the end of the exercise.

Exercise INTREPID 2015 also tested communications with the public. A simulated media website was used to provide news articles, radio news stories and two daily news video broadcasts about the event. This website made the exercise more realistic for the players by providing a news environment that simulates real world news coverage. Since many Canadians look to social media sources of credible information,

sharing public messaging through simulated social media was also tested during the exercise.

A very robust simulation cell was established at the exercise control cell in Ottawa which was responsible for ensuring the public affairs personnel were challenged with questions and concerns presented by the media and general public.

The exercise website also provided a secure area where press releases and emergency bulletins were shared with other organizations for their role in public messaging, allowing them an additional mechanism to ensure their public messages were coordinated. Both NB Power and the Province were proactive in the management of public awareness and conducted press conferences throughout the exercise to provide valuable and current information to the members of the

media and public.

Exercise INTREPID 2015 created a unique platform that gave participating organizations the opportunity to fully test their plans, work with other organizations that would be involved in a collective response effort and practice communications in a realistic and interactive environment.

INTREPID is unique. It gives an opportunity for all the different players to come together to really say how do the interfaces work. We assume certain things from each of our partners unless we test those, see if the interfaces are working and see if the information is flowing smoothly.

So how did we do? Is Canada and, in particular, the Province of New Brunswick, prepared to respond to a nuclear emergency at the Point Lepreau Generating Station?

Throughout Exercise INTREPID emergency operation centres at the regional, provincial and federal levels were challenged at a level not normally experienced through regular drills and exercises. Overall, participating organizations met all of the response objectives and were able to identify some areas that can be improved upon, all in an effort to optimize capability and ensure the continued preparedness of New Brunswick for this extremely unlikely event.

Exercise INTREPID 2015 clearly demonstrated the ability of NB Power, the Province of New Brunswick and the various levels of government to coordinate the response to a nuclear emergency in an efficient and effective manner. New Brunswick is prepared. Now it's up to you as a Canadian to make sure that you are prepared too, if you live near a nuclear power plant stay informed,

have a plan, and know what to do in the unlikely event that an emergency could happen where you live. If you reside near the Point Lepreau Generating Station read the information packages that are sent to your home or visit these websites for more information."

MR. PLUMMER: Brett Plummer for the record.

They show in this video the INTREPID Exercise coordinated a multiple agency response that successfully met all objectives. But I would also like to reiterate that this video is available on our website.

NB Power recognizes the significance and value of First Nations and believes it is important to engage with First Nations to build relationships. We are committed to fostering positive and productive relationships with NB First Nations communities, organizations and agencies as well as government departments working with First Nations through its focus on delivering on three objectives; engagement, engagement, employment. These are the pillars of the NB Power strategic approach to First Nations affairs.

NB Power and Point Lepreau have engaged

with various Aboriginal representatives for over 15 years. At present, NB Power meets regularly with MTI as well as Maliseet Nations of New Brunswick. Monthly meetings to discuss consultation of various corporate projects are used to provide updates and maintain engagement with the Point Lepreau Nuclear Generating Station.

Additionally, Point Lepreau Nuclear Generating Station employs an open and respectful relationship with Chief Hugh Akagi and Passamaquoddy Nation as well as the tribal councils which is MAWIW and the Union of New Brunswick Indians.

We are pleased to report the consultation and capacity funding agreements have been reached with the Maliseet Nation of New Brunswick which represents five of the six Maliseet communities. A similar agreement is in the process of negotiation with MTI.

For the coming weeks NB Power and the Woodstock First Nation will meet to agree upon an approach towards consultation.

NB Power delivers a presentation to staff that provides an orientation to New Brunswick First Nations, their history and culture. We are also working with the University of New Brunswick, the College of Extended Learning and the Mi'kmaq and the Woodstock Centre on Development of an online cultural awareness course.

Point Lepreau staff have invited Aboriginal groups to the station for site visits and tours. Last month the station employed -- enjoyed hosting a tour for MTI. A similar visit has been offered to the Maliseet.

New Brunswick Power sponsors various educational initiatives. Summer camps focused on all hands science learning have been held and several summer placements have been arranged for a number of years.

NB Power and the Department of Energy and Resource Development have co-sponsored one Mi'kmaq and one Maliseet participant for a national three-week program where Indigenous leaders from across Canada are brought together to network and develop skills for advancing clean community energy projects. New Brunswick is hosting the first of a three-week program this week with the cooperation of NB Power.

Employment opportunities continue to be advanced through the cooperation of Aboriginal educations, educational institutes, unions and contractors. NB Power continues to work to advance increasing the Aboriginal participation in its workforce as well as that of contractors.

Community Engagement: New Brunswick Power is committed to robust and responsive communications built on the principles of transparency and openness. We provide

several pathways for people to access information in a way that is meaningful to them.

Information requests are not one-size-fits-all, so we provide access to technical staff who can provide the necessary detail. Requests can range from information on technical process or environmental performance to simply: How does nuclear work? In some cases, we'll hold one-on-one technical meetings with interested individuals to fully explore and understand their needs or concerns.

Building strong relationships is fundamental. We hold ourselves to a high standard of corporate citizenship and partner with the people on initiatives that matter to them, whether they're part of our local community, our employees, Aboriginal communities with an interest in our station, environmental groups or our industry partners. We strive to be a partner that people can count on and on a station people can trust.

We also communicate through newsletters, our website, community meetings, outreach, public information sessions to ensure everyone can access information in the way that's most relevant and useful to them.

We constantly seek feedback to ensure we are addressing people's interests. This includes a routine

telephone survey of 600 plus stakeholders and community members. When we did the survey in 2015 the results were positive. When we repeated this survey, most recently in March of 2017, we found people's opinion in our station's operation had strengthened even further.

As discussed during Day 1 hearing, these surveys compile a random cross-section of New Brunswickers and previous surveys did not specify or track certain targeted populations. This year, however, we have verified that the survey responses from our Aboriginal communities slightly exceeded the population ratio, therefore, ensure a strong voice.

Aside from providing safe, predictable and reliable energy, Point Lepreau is a people-centered business and that is not just about people in the plant, we are committed to maintaining and improving on the trusted relationships we have with our community of interest.

So, in conclusion, the station is safe and we meet all regulatory requirements. We are personally accountable and responsible for station operations. We are committed to the community and Aboriginal engagement. We are qualified to continue operating the Point Lepreau Nuclear Generating Station. We are committed to providing New Brunswick with safe, predictable, reliable and environmentally responsible electricity.

We are asking the CNSC to grant a five-year operating licence for our station.

Every employee plays their part to ensure our station operates safely to the highest standards. We have amazing people. They take great pride in their work which is evident in the operating results we have shared with you.

They also understand the enormous responsibility they have to ensure we operate safely. To them, it's a very personal responsibility. They don't just work at the station, they and their families live and engage in the community that surrounds us. Thanks to them Point Lepreau has an excellent safety record.

We thank you for letting us discuss it with you today and we are asking the CNSC to grant the five-year operating licence for the station.

This concludes our presentation and we welcome the opportunity to address any questions.

THE PRESIDENT: Thank you.

I'd like now to proceed to the presentation from CNSC staff as outlined in CMD 17-H2.B and 2.C.

Mr. Frappier, you may proceed.

CMD 17-H2.B/H2.C

Oral presentation by CNSC staff

MR. FRAPPIER: Merci. Bonjour, Monsieur le Président, Membres de la Commission.

Je m'appelle Gerry Frappier. Je suis le directeur général de la Direction de la réglementation des centrales nucléaires.

With me today is Mr. Ben Poulet, Director of the Gentilly-2 and Point Lepreau Regulatory Program Division; Mr. Lee Casterton, Senior Regulatory Program Officer of the same division; the CNSC site office Supervisor, Mr. Burton Vaply, as well as CNSC inspectors are also here today.

We are also joined by CNSC technical support staff who are either here or listening from Ottawa to any questions the Commission may have. I would point out that due to the floods happening in the Ottawa/Gatineau area there is a bit of -- some are at the CNSC in Ottawa and some are at home in Gatineau, so there may be a little bit of a technical sort of issues on some of those questions and answers.

Finally, I would like to acknowledge the staff from the other federal and provincial governments, as you mentioned earlier, that are also here to provide

technical support.

It's our pleasure to be here today in the City of Saint John for Part 2 of this hearing which greatly facilitates the in-person participation of the local community members and representatives that are either directly involved or very interested in the activities associated with the operation of Point Lepreau Nuclear Generating Station.

The staff presentation today will highlight information found in CMD 17-H2 and will provide an overview of the purpose of the hearing and of the Point Lepreau facility, the many steps of the CNSC licence renewal process, how the CNSC maintains regulatory oversight of the nuclear facilities, the results of the CNSC staff assessment of the past safety performance at Point Lepreau and other matters of regulatory interest, the proposed licence and Licence Condition Handbook and, finally, the CNSC staff conclusions and recommendations.

We'll begin with a review of the purpose of this two-part Commission hearing.

The purpose of this Commission hearing is to consider the licence renewal application for the Point Lepreau power reactor operating licence submitted by New Brunswick Power in June of 2016.

Part 1 of the Commission hearing was held in Ottawa on January 26th, 2017. Part 2 of the Commission hearing begins today and provides an opportunity for First Nation groups and the public to participate through both written and oral intervention.

New Brunswick Power is requesting a licence renewal for a period of five years.

I will now pass the presentation over to Mr. Ben Poulet who will provide an overview of the Point Lepreau station and the New Brunswick Power licence application.

MR. POULET: Thank you, Mr. Frappier.

Monsieur le Président, Members of the Commission. My name is Ben Poulet, I'm the Director of the Gentilly-2 and Point Lepreau Regulatory Program Division.

Je m'appelle Ben Poulet. Je suis le directeur du Programme de réglementation des centrales de Gentilly-2 et Point Lepreau

It is my pleasure to be here in Saint John today, or this week for Part 2 of this hearing.

We'll begin this part of the staff presentation with an overview of the Point Lepreau site. The Point Lepreau site is owned and operated by the New Brunswick Power Corporation, a Canadian corporation whose

head office is located in Fredericton, New Brunswick.

The Point Lepreau nuclear facilities are located on the Lepreau Peninsula approximately 40 kilometres southwest of the City of Saint John. The site is home to a nuclear electrical generating station and a solid radioactive waste management facility which is designed to sort the radioactive waste produced by the generating station.

The generating station consists of a single 705-megawatt CANDU reactor unit which came into service in 1983. The Point Lepreau reactor underwent a major refurbishment starting in 2008 and returned to commercial operation in November of 2012.

The current Point Lepreau power reactor operating licence expires on June 30th, 2017. CNSC staff notes the current licence covered the activities required to return the station to commercial operation following completion of the refurbishment in 2012.

The current licence also covers the operation of the solid radioactive waste management facility, the activities associated with nuclear substances and prescribed equipment, as well as a limited number of import and export activities.

The proposed licence is for the five-year period commencing on July 1st, 2017 and expiring on June

30th, 2022. It covers the same activities NB Power is currently licensed to carry out.

Keeping in mind the purpose of this hearing, we will now provide an overview of the many steps which constitutes the CNSC licence renewal process for power reactors.

As can be seen on this slide, the CNSC licence renewal process for existing power reactors is quite extensive and takes approximately two years to complete.

The process begins with confirming the CNSC regulatory requirements associated with the licence renewal process. These were officially communicated to NB Power on November 4th, 2015. This was followed up in February of 2016 when CNSC staff provided the list of new and updated CNSC regulatory documents and CSA standards that would be included in the licensing basis. These, along with the already established regulatory requirements, had to be addressed by NB Power in the Point Lepreau licence renewal application and, as well as, in the supporting documentation.

The Point Lepreau licence renewal application was submitted by NB Power on June 20th, 2016. CNSC staff conducted a technical assessment of the NB Power application to confirm all requirements were addressed.

This CNSC staff assessment was completed on August 11th, 2016 and it concluded additional information was required. NB Power provided all of the required additional information on September 2nd, 2016. CNSC staff completed the review and concluded the NB Power licence application met all of their regulatory requirements.

CNSC staff then prepared CMD 17-H2 which documents the CNSC staff assessment and conclusions and submitted it to the Commission Secretariat on December 28th, 2016.

The Commission conducts a two-part public hearing to consider the application. Part 1 of the hearing was held in Ottawa on January 26th, 2017 while Part 2 of the hearing is being conducted this week here in the City of Saint John.

The public and First Nations people are invited to participate, either in writing or in person, following Part 1 of the hearing.

The Commission will consider all of the information presented either in writing or in person during the hearing before it renders its decision on the licence renewal of the Point Lepreau Nuclear Generating Station.

CMD 17-H2 presents the CNSC staff conclusions and recommendations for consideration by the Commission during the two-part hearing.

CMD 17-H2 not only focuses on the CNSC staff review of the NB Power licence renewal application but also includes a review of the following: NB Power safety performance over the current licensing period for all of the 14 safety and control areas; the applicability and implementation of new and updated CNSC standards and CNSC regulatory documents; the results of the ongoing compliance and verification activities conducted by CNSC staff; and the status of the ongoing corrective actions and improvement initiatives being implemented by NB Power.

The CNSC introduced periodic safety reviews, known as PSRs, to the regulatory framework in April of 2015. NB Power previously completed an integrated safety review, or ISR for short, which was the precursor to the PSR in accordance with CNSC requirements.

The ISR identified key safety improvements that were addressed during the refurbishment and life extension project for Point Lepreau.

Both the ISR and PSR processes ensure periodic assessments are completed against modern codes, standards and industry best practices. The goal is to identify reasonable and practical safety improvement opportunities.

In accordance with the ten-year review cycle, NB Power will complete a PSR in accordance with

REGDOC-2.3.3 during the proposed licence period. The PSR process requires NB Power's submittal and CNSC staff acceptance of the PSR basis document, safety factor reports, a global assessment report and an integrated implementation plan.

PSRs are currently being conducted at all Canadian nuclear power plants and are an effective tool in achieving continuous improvements in safety performance.

We will now focus on the CNSC staff regulatory oversight of the current operations at Point Lepreau.

The CNSC has a clear and robust regulatory framework in place to ensure the continued safe operation of nuclear facilities. The regulatory oversight is maintained to ensure licensees operate in a safe manner in compliance with the *Nuclear Safety and Control Act*, its regulations, as well as the Commission approved licence conditions.

Regular inspections and evaluation verify that licensees are compliant with the laws and regulations, as well as the conditions specified in their licences. In this way the CNSC can ensure licensees are operating safely and adhering to regulatory requirements.

Licensees are required to notify the CNSC of situations or events they find in CNSC regulatory

document REGDOC-3.1.1 and to submit routine schedule reports on a quarterly or annual basis to the CNSC on various topics.

Compliance verification activities may be baseline or reactive, announced or unannounced, and scheduled or unscheduled. The compliance verification activities listed on this table provide CNSC staff with the means required to maintain regulatory oversight of the licensed activities across all safety and control areas which will be covered later in this presentation.

Type I and Type II inspections evaluate licensing programs and their outputs and outcomes. They consist of documentation reviews conducted in the CNSC headquarters, as well as on-site inspection activities conducted at Point Lepreau.

Compliance and desktop reviews also evaluate NB Power programs and their outputs but are typically conducted by CNSC subject matter experts working in CNSC headquarters in Ottawa without the conduct of any site inspection activity.

Field inspections and surveillance and monitoring activities are typically conducted by CNSC site inspectors to collect compliance data, monitor the conductive licensee activities, review station logs and to identify any issue arising.

CNSC staff also reviews unplanned events and schedule reports submitted in accordance with REGDOC-3.1.1, entitled Reporting Requirements for Nuclear Power Plants. The baseline compliance verification activities are determined based on areas that require, or appear to require, further licensee attention or licensee activities schedule dependent.

For example, the conduct of an infrequently performed maintenance or testing activity may prompt CNSC staff in a site office or in Ottawa to conduct a reactive compliance verification activity.

Additional planned and unplanned reactive compliance activities may also be conducted at any time to ensure regulatory oversight of any unexpected occurrences, such as a spill or the occurrence of unusually severe weather.

In summary, CNSC staff has developed the means and the approach required to ensure regulatory oversight of the licence activities is maintained under all conditions.

During the last five years, from 2012 to 2016, the conduct of compliance verification activities by CNSC staff amounted to over 13,000 person-days of effort. On the basis of these compliance verification activities CNSC staff concludes NB Power continues to implement and

maintain programs that meet CNSC regulatory requirements.

CNSC staff has 74 baseline and reactive compliance verification activities planned for the current fiscal year. Among those are four key specific areas which were noted during Part 1 of this hearing.

They are listed here to confirm the CNSC compliance verification program maintains ongoing regulatory oversight of the NB Power safety performance in all key areas of interest, as explained in Part 1 of this hearing.

Additionally, and as stated earlier, planned compliance activities do not limit in any way the ability of CNSC staff to conduct additional compliance activities should the need arise.

NB Power is required to provide reports, notifications and filing of specific records in accordance with CNSC regulatory documents, REGDOC-3.1.1, entitled Reporting Requirements for Nuclear Power Plants.

NB Power notified the CNSC staff of all reportable events and submitted all performance reports in accordance with CNSC regulatory reporting requirements.

CNSC staff reviews all event initial reports and follow-up reports, as well as all Compliance and Safety Performance Reports, and keeps the Commission informed through regular status of Power Reactor Update

Reports and the annual Regulatory Oversight Report for Canadian Nuclear Power Plants.

The 2016 Regulatory Oversight Report will be presented to the Commission in August of this year.

The Commission will recall Part 1 of this hearing was held approximately three and a half months ago. The Point Lepreau Station operated on a continuous basis since then, until April 8 of 2017, when Point Lepreau began a planned maintenance outage with a focus on improving equipment reliability.

The main activities completed during the outage were maintenance on electrical systems and equipment, maintenance on nuclear process and safety systems and maintenance of both the east and west fuel machine bridges.

Compliance verification activities were conducted throughout the outage by CNSC site inspectors.

CNSC site inspectors verified that operational activities conducted to change the plant status, proceed with the shutdown, cooldown and maintenance of equipment and return to service were carried out safely and in accordance with approved procedures and practices.

CNSC site inspectors also verified maintenance activities were conducted in a safe manner in accordance with approved processes and procedures.

The Commission will recall CNSC staff reporting the need for NB Power to improve performance in the area of procedural adequacy and adherence during Part 1 of this hearing.

CNSC staff has continued to monitor the NB Power progress in this area and has since confirmed an improving trend.

We will now focus on the CNSC staff's Safety Performance Assessment of the current operations at Point Lepreau.

The performance assessments include topics discussed during Part 1 of the Commission hearing and interventions submitted in Part 2 of this hearing.

This slide presents the CNSC safety plant performance ratings for the Point Lepreau Nuclear Generating Station.

As shown, Point Lepreau has received a satisfactory integrated plant rating each year from 2012 to 2016.

CNSC staff notes that the 2016 performance ratings were not available in time for Part 1 of the hearing and are still anticipatory at this time as the annual Regulatory Oversight Report, which will include the final ratings, will be presented to the Commission in August of this year.

CNSC staff is confident that NB Power will continue to operate Point Lepreau safely and that NB Power will continue to maintain and implement adequate programs and fulfil regulatory commitments during the proposed licence period.

During the current licence period, from 2012 to today, CNSC staff verified the following.

No worker or member of the public received a dose in excess of the regulatory dose limits, and all radiological releases were well below regulatory limits.

The NB Power programs are implemented and maintained in accordance with regulatory requirements and NB Power continues to make safety enhancements and improvements to the station. Overall, CNSC staff concludes NB Power has made adequate provision for the protection of workers, the public and the environment.

I will now turn over the presentation to Mr. Lee Casterton, who will provide more information on the CNSC staff safety performance assessment as well as other matters of regulatory interest. Thank you.

MR. CASTERTON: Thank you, Mr. Poulet.

Mr. President, Members of the Commission, my name is Lee Casterton. I am a Senior Regulatory program Officer with the Gentilly-2 and Point Lepreau Regulatory Program Division.

Probabilistic Safety Assessment, known as PSA, is an analytical tool that complements deterministic safety analyses which confirms the original design basis of the plant. The plant was designed using deterministic safety rules and proven engineering techniques and practices which consider defence in depth, radiation protection and safety margins.

CNSC staff have reviewed and accepted all of the deterministic safety analyses, which demonstrates all safety systems provide adequate coverage. In other words, the reactor will automatically shut down and be supplied with cooling for the fuel following a serious event.

In terms of probabilistic safety assessment, CNSC staff have reviewed and accepted all methodologies and the PSA findings, including the seismic PSA, the integrated overall PSA and the PSA-based seismic margin assessment. The results of these assessments will be presented in the next slides.

CNSC staff have concluded NB Power is compliant with CNSC REGDOC-2.4.2 and all safety goal limits are met for Point Lepreau.

Furthermore, NB Power must submit the next PSA update in April 2022 in accordance with the five-year review cycle.

This table shows the Level 1 and Level 2 PSA results from both 2008 and 2016. As shown by the bolded total, which is a simple summation of the total at power and the total at shutdown, all safety goal limits are met. CMD 17-H2 provides more information about the values presented in this table and their safety significance.

The definition of safety goals is included in the licensing basis. The safety goal limit represents the limit of tolerability of risk above which actions must be taken to reduce the risk. The safety goal target is set one order of magnitude lower and represents the desired objective towards which the facility should strive provided that measures to further reduce the risk are cost-effective.

In the event the target is exceeded, the licensee develops a plan to assess the potential safety improvement opportunities and determine if the plant changes are warranted. Tracking implementation of the proposed licensee actions occurs through ongoing compliance verification activities such as opening an action item and the conduct of inspections.

NB Power also completed a PSA-based seismic margin assessment, known as a PSA-based SMA, to evaluate the impact of seismic events on structures, systems and components. NB Power submitted its methodology

in June of 2016 and CNSC staff concluded it was acceptable and met regulatory requirements.

NB Power completed its PSA-based SMA using the accepted methodology and submitted the Level 1 and Level 2 assessments in June and September of 2016. The PSA-based SMA were reviewed and accepted by CNSC staff in April of 2017.

The results are compared to a review level earthquake, which is defined as an earthquake with an equivalent return period of 10,000 years. The results indicate that the Point Lepreau Generating Station meets the review level earthquake.

The change in severe core damage frequency from 0.3g in 2008 to 0.344g in 2016 is caused by improvements in model pathways and weighting factors as well as updated input data.

The large release frequency decrease from 0.42g in 2008 to 0.35g in 2016 is the updated study identified a structural weakness related to a non-safety significant fixture in the main control room. NB Power is currently assessing this weakness to determine the appropriate remedial actions.

CNSC staff is satisfied the severe core damage and large release frequencies meet the review level earthquake of 0.344g, representing a one-in-10,000-year

earthquake. Although NB Power meets the safety requirements associated with a review level earthquake, NB Power is assessing the need for corrective actions to increase the high confidence and low probability of failure for a large release frequency.

The safety report referenced in the current LCH was submitted in December of 2012 and reviewed and accepted by CNSC staff in April of 2014. This safety report demonstrates that adequate safety margins are in place at Point Lepreau.

A safety report update was submitted by NB Power in 2016. CNSC staff have completed the review of the safety report updates and accepted the report in April of 2017.

NB Power must submit the next safety report update in April of 2022 in accordance with the five-year review cycle.

NB Power has comprehensive emergency plans in place to respond to emergencies and to provide support to offsite authorities. NB Power's plans and programs meet current CNSC regulatory requirements and an implementation plan for REGDOC-2.10.1 is required by September 30th of this year.

Program updates to the emergency preparedness and fire protection program include the

transition to a dedicated full-time fire brigade and the procurement of new equipment such as emergency mitigating equipment, radiation monitoring equipment and additional firefighting equipment. In addition, NB Power has installed an automated remote gamma monitoring system at the site fence and has completed the implementation and training on Severe Accident Management Guidelines, also known as SAMG.

New Brunswick Emergency Measures

Organization, referred to as NB EMO, is responsible for the implementation of the provincial offsite nuclear emergency plan. The offsite plan builds upon the province's all-hazard incident command system, which allows the response organization to expand or contract based on the consequences of the accident. The provincial offsite plan is aligned with national and international recommendations and guidance.

In addition to having a comprehensive technical planning basis for the offsite plan, NB Power and NB EMO regularly test these arrangements in full-scale exercises. During Exercise Intrepid in 2015, NB Power and NB EMO demonstrated the current response arrangements can effectively deal with a severe accident.

Point Lepreau activated its emergency response organizations during the exercise and demonstrated

its ability to effectively respond to the emergency. NB EMO activated its offsite nuclear emergency plan and demonstrated its ability to effectively implement a coordinated multi-agency response in the unlikely event of a radiological release from the Point Lepreau facility.

Public alerting, communication and interoperability were successfully demonstrated. The exercise also included participation of the public, with over 200 residents performing an actual evacuation.

In addition to the full-scale response exercise held in 2015 and the previous exercise completed in 2012, NB EMO held a recovery exercise in 2017 with provincial and federal partners.

In addition, NB Power has an exercise plan for next year entitled Synergy Challenge 2018. CNSC staff will be present during this exercise.

CNSC staff observed effective integration and implementation of emergency response plans during all exercises. CNSC staff concludes that all reviewed plans have the required linkages to ensure harmonization of the plans and that both NB Power and NB EMO have comprehensive emergency arrangements in place to protect the public.

Please note that NB EMO is with us today and are available to answer any questions.

NB Power holds a single license which

includes the operation of a solid radioactive waste management facility, known as the SRWMF, located on the Point Lepreau site. The SRWMF is comprised of three phases or sites: low and intermediate operational waste is stored in Phase 1 of the facility; Phase 2 is a dry storage facility for spent fuel; and Phase 3 of the facility stores waste generated during the refurbishment of Point Lepreau.

Waste is safely transferred from the Point Lepreau station and stored at the waste facility in accordance with CNSC regulatory requirements. Some low-level waste, such as rags, paper and gloves, are transported to the United States for incineration and returned to point Lepreau for final storage.

NB Power has implemented and maintained an effective program that promotes minimization, segregation and proper handling of storage of waste. CNSC staff concludes that NB Power waste management program meets regulatory requirements.

NB Power submitted a revised preliminary decommissioning plan and decommissioning cost study in June of 2015. CNSC staff reviewed these submissions and concluded they met CNSC regulatory requirements.

NB Power is responsible for the cost of the future decommissioning of the Point Lepreau site and waste storage facilities and must maintain a financial

guarantee which is acceptable to the Commission. The financial guarantee covers the cost of decommissioning the entire site as well as the lifecycle management of all waste generated from ongoing operations. The current NB Power financial guarantee meets regulatory requirements.

The preliminary decommissioning plan anticipates commercial operations to cease in 2040 and the site to be decommissioned and available for other industrial uses by 2081. The release criteria for licence to abandon include all radioactive contamination in excess of the established clearance levels and all other hazardous materials to be removed from the site. All the facility systems must be dismantled and all the structures and land areas are decontaminated.

In accordance with regulatory requirements, NB Power must obtain approval from the Commission prior to decommissioning.

NB Power currently meets all CNSC regulatory requirements for environmental protection. Environmental protection covers programs and processes that identify, control and monitor all releases of nuclear and hazardous substances and effects on the environment from the Point Lepreau site. Important environmental protection programs include the Effluent Control Program, environmental monitoring and the environmental management

system.

Supplemental CMD 17-H2.B was submitted by CNSC staff to the Commission on April 26, 2017. The supplemental CMD includes the new 2016 data from the CNSC's Independent Environmental Monitoring Program, known as the IEMP. Samples taken included beets, zucchini, clams and surface water from local residents. The 2016 results were also posted on the CNSC website. The 2016 IEMP results remain well below guidelines and CNSC reference levels.

The supplemental CMD also includes the status of the *Fisheries Act* Authorization, which will be discussed later in this presentation, and the CNSC staff's review of the updated environmental risk assessment. The new information does not change CNSC staff conclusions of CMD 17-H.2 or the EA report that NB Power has and continues to make adequate provision for the protection of the environment and the health of persons.

The three radionuclides shown here are the highest contribution to public dose from airborne releases. As shown, the 2015 total airborne releases are well below the derived release limits set in the LCH. Derived release limits, known as DRLs, are required for the purpose of protecting members of the public from radionuclides released into the environment during the normal operation of Point Lepreau.

DRLs have been developed by NB Power in accordance with CSA Standard N288.1. CNSC staff reviewed and accepted the DRLs, which are included in the proposed LCH. Furthermore, the maximum weekly release was also below the action levels set in the proposed LCH as one percent of the weekly DRL.

Action levels are precautionary levels set well below DRLs for radionuclides released by airborne and waterborne pathways. In the event an action level is exceeded, the licensee must notify the CNSC, conduct an investigation to identify the cause, determine if a loss of control occurred and implement appropriate corrective actions.

The two radionuclides and gross beta-gamma shown here are the highest contribution to public dose from waterborne releases. As shown, the 2015 waterborne releases are well below the DRLs set in the LCH. Furthermore, the maximum monthly release was also below the action level set in the proposed LCH as one percent of the monthly DRL.

Please note there is an error in the table and the second column should read "2015 Total Waterborne Releases."

The annual maximum effective dose has been well below the CNSC's regulatory dose limit of 1 mSv a year

from 2012 to 2015. The maximum dose for 2016 will be presented to the Commission in the Regulatory Oversight Report for Canadian NPPs.

NB Power has a Radiological Environmental Monitoring Program that monitors Point Lepreau releases to the environment and determines the dose to the public based on monitoring results and sampling of local produce, fish, seafood, vegetation and well water from local residents. The current ecological effects review and human health risk assessment were conducted prior to the refurbishment of Point Lepreau.

NB Power submitted a revised environmental risk assessment in June of 2015 and an updated version in January of 2017 which included additional information on thermal discharges. The ERA has been reviewed and accepted by CNSC staff and is publicly available upon request. CNSC staff conclude that the environment and human health remain protected around the Point Lepreau site.

The updated ERA is part of continuous improvement and supports the implementation of a number of N288 series standards to be completed in accordance with the proposed LCH. Information accepted by CNSC staff from the June 2015 ERA as well as additional information submitted in the updated assessments was summarized in the CNSC's EA report.

I will now turn our attention to other matters of regulatory interest related to the NB Power licence renewal application for Point Lepreau.

CNSC staff identified 18 First Nations and organizations based on potential interest in the licence renewal for the Point Lepreau site as it is located within their treaty lands and/or asserted traditional territories. Appendix F of CMD 17-H2 shows a map of the Atlantic Region aboriginal communities.

In October of 2016, CNSC staff sent letters of notification to all identified First Nations and organizations and completed follow-up phone calls. Follow-up information, including CMD 17-H2, were sent to identified First Nations and organizations in January of 2017.

In December of 2016, two First Nations and two organizations were awarded approximately \$65,000 through the CNSC's Participant Funding Program to participate in Part 2 of the Commission hearing. It should be noted that the two organizations are representing a total of 15 First Nations in New Brunswick. Four oral interventions were received from the two First Nations and two organizations, fulfilling their obligations for participant funding.

Since the notification letters were sent

in October of 2016, CNSC have offered interested First Nations and organizations to meet in person or via teleconference. Since January of 2017, CNSC staff have met with each of the First Nations and organizations intervening in this hearing.

CNSC engagement with First Nations and organizations is an ongoing process not limited to this licence renewal application. CNSC staff are committed to working with NB Power and interested First Nations and organizations to address all concerns raised.

On February 2nd, 2017, CNSC staff held a CNSC 101 information session in Saint John, New Brunswick. The open house was attended by 12 members of the public, including a First Nation organization. The open house provided an opportunity for CNSC staff to engage with the local communities and answer any questions.

The Canadian Environmental Law Association and Conservation Council for New Brunswick applied as a single recipient and was awarded approximately \$9,000 through the Participant Funding Program to participate in the Part 2 hearing.

In total, the CNSC received 91 interventions from local residents, businesses and educational institutions, as well as non-governmental organizations and representatives from various levels of

government. Fifty-six interventions were filed as written submissions, with an additional 35 oral submissions to be heard during Part 2 of this hearing.

This Part 2 hearing is being conducted in the host community of Saint John to promote public participation in the Commission hearing process. The CNSC is committed to being an open and transparent regulator.

In April 2016, NB Power submitted a preliminary self-assessment to determine the requirement for *Fisheries Act* Authorization. CNSC staff reviewed the self-assessment and requested NB Power to submit additional information. The revised self-assessment was submitted in January of 2017 and CNSC staff have confirmed the acceptability of the data presented by NB Power and the conclusion that a *Fisheries Act* Authorization is required. Much of the technical data in the self-assessment will eventually go into the application itself.

The next steps in obtaining a *Fisheries Act* Authorization will include quantifying the benefits of NB Power's proposed offsets and performing aboriginal engagement on this matter. These are both requirements of the application itself set by Fisheries and Oceans Canada.

The future application is expected to have the aboriginal groups' feedback incorporated and details of what the groups have raised as concerns, including how

these concerns were addressed.

Timelines for NB Power submitting a *Fisheries Act* Authorization application depend on how long this engagement takes. However, NB Power anticipates submitting an application by the fall of 2017.

CNSC staff conclude that there are no issues that impact the licensing process under the *Nuclear Safety and Control Act* and the issuance of a power reactor operating licence by the Commission does not limit the ability of DFO to fulfil its mandate under the *Fisheries Act*.

To monitor closure of remaining actions associated with the Fukushima action items, CNSC staff raised station-specific action items in 2016. Overall, CNSC staff are satisfied that NB Power has strengthened reactor defence in depth and enhanced its emergency response capabilities to respond to a Fukushima event.

CMD 17-H2 describes five remaining station-specific action items that were being addressed by NB Power. Since the time of writing the CMD, NB Power has closed three of the remaining items related to the evaluation of compensatory measures concerning malevolent aircraft impact, verification of a real-time boundary monitoring system, and implementation of additional coolant make-up provisions.

I will now provide a brief update on the remaining two actions and their current status.

In relation to the evaluation of the emergency response to a malevolent aircraft impact, NB Power submitted a closure request for the remaining activity in April of 2017. The closure request is currently under review by CNSC staff.

NB Power also submitted its habitability assessment in 2016 which underwent review by CNSC staff. NB Power is currently implementing the remaining design improvements, including portable filtered air supply system, commissioning an exhaust fan and the inspection of the building to apply and/or replace sealants as necessary due to degradation. The latest schedule from NB Power indicates all remaining activities associated with this action item to be closed by September of 2017.

CNSC staff continue to monitor remaining actions through ongoing compliance verification activities and will report to the Commission through the Regulatory Oversight Report for Canadian NPPs.

I will now briefly discuss the proposed licence and Licence Conditions Handbook.

Part 2 of CMD 17-H2 contains CNSC staff's proposed power reactor operating licence and Licence Conditions Handbook. CNSC staff are recommending the

licence be reviewed for a period of five years, as captured in the proposed licence.

The proposed Licence Condition Handbook contains the detailed compliance verification criteria used by CNSC staff to ensure compliance with each licence condition of the proposed operating licence.

The proposed Licence Conditions Handbook also includes guidance for NB Power such as standards and guidelines that are not regulatory requirements but may include best practices that should be considered in normal operations.

NB Power is compliant with current regulatory requirements. Since 2012, many new or revised CNSC regulatory documents and CSA standards have been updated. NB Power has performed gap analyses and provided transition plans with implementation dates.

Implementation dates have been accepted by CNSC staff and are captured in the proposed Licence Conditions Handbook.

CNSC staff will update the Commission via the annual Regulatory Oversight Report for Canadian NPPs.

In the meantime, NB Power has adequate measures in place for all safety and control areas.

In total, a total of 19 new or revised CNSC regs docs and CSA standards have been added as updated

requirements in the proposed Licence Conditions Handbook.

This means that the current requirements are being replaced by a newer version of a reg doc or CSA standard in the spirit of continuous improvement.

As shown on this slide, there are ten new or revised CNSC reg docs that are being proposed as updated requirements to be implemented by July 31, 2017.

The implementation dates listed were accepted by CNSC staff and, as shown in this table, nine out of the ten reg docs will be fully implemented by the date of the issuance of the proposed licence on July 1, 2017.

In addition to the CNSC reg docs, there are also nine new and revised CSA standards being proposed for inclusion in the Licence Conditions Handbook.

The implementation dates are listed in this slide, with most standards fully implemented on the proposed licence and Licence Conditions Handbook come into effect.

CNSC staff will continue to monitor and update the Commission via the regulatory oversight report on the progress of these continuous improvement activities.

Furthermore, these annual updates will also include the implementation of new and revised reg docs and standards identified on a continuous basis during the

proposed licence period.

I will now pass the presentation over to Mr. Gerry Frappier for the CNSC staff's overall conclusions and recommendations.

MR. FRAPPIER: Thank you, Mr. Casterton. Based on the assessment of the New Brunswick Power safety performance at Point Lepreau, CNSC conclude that, as per section 24(4) of the Nuclear Safety and Control Act: New Brunswick Power is qualified to carry out the activities authorized by the licence; and, in carrying out the licensed activities, New Brunswick Power has made, and will continue to make, adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

CNSC staff recommend that the Commission accept the CNSC staff conclusions and recommendations presented in CMD 17-H2; and exercise its authority under the Nuclear Safety and Control Act to renew the licence to authorize New Brunswick Power to continue to operate the Point Lepreau Nuclear Generating Station from July 1st, 2017, to June 30, 2022.

CNSC staff also recommend that the Commission authorize the delegation of authority, as

indicated in licence condition 3.2, for a reactor restart following a serious process failure and licence condition 16.2 for the extension of the SRWMF.

Both of these licence conditions are also captured in the current power reactor operating licence for Point Lepreau.

So, with that, thank you, Mr. President and members of the Commission. CNSC staff present here and in Ottawa are prepared to respond to any questions you may have.

MR. LEBLANC: Thank you. Since we have a bit of time before lunch, we will now move to the interventions. I think Louise will kind of set up the City of Saint John, who is going to be the first intervenor but, before we start, I would like to remind intervenors appearing before the Commission today that we have allocated ten minutes for each oral presentation and we would appreciate your assistance in helping us to maintain that schedule.

Your more detailed written submission has already been read and will be duly considered. There will be time for questions from the Commission after each presentation and no time limit has been ascribed for the question period.

To help you in managing your time, a timer

system is being used. The light will turn yellow when there is one minute left and turn red at the ten-minute mark.

Mr. President?

THE PRESIDENT: The first presentation is by the City of Saint John as outlined in CMD 17-H2.35. I understand that Fire Chief Clifford will make the presentation. Chief Clifford, the floor is yours.

CMD 17-H2.35

Presentation by the City of Saint John

MR. CLIFFORD: Good evening or good morning, ladies and gentlemen.

Just give me one second. So good morning, Mr. President and Commission members. On behalf of the mayor and council, it's our pleasure to welcome you to Saint John. We sure hope that the hearings don't take you too long so that you miss some of the -- or get a chance to enjoy some of the night life, some of the restaurants and cheer on the Sea Dogs.

So we'll all rally together around that.

My name is Kevin Clifford. I am the Chief of the Saint John Fire Department and also the Director of Saint John Emergency Measures Organization.

It is a pleasure to appear before you on behalf of the City of Saint John.

By way of background, the City of Saint John was Canada's first incorporated city and has been providing municipal services to local citizens, businesses, and industry for more than two centuries, including the delivery of essential public safety functions.

Saint John serves as southern New Brunswick's primary economic hub and a regional trading gateway to New England, the Atlantic Basin and beyond.

While the region's economy is increasingly diversified, the energy and advanced manufacturing sector remains of critical importance.

The Saint John region is a focal point within the international northeast region with respect to value-added hydrocarbon processing, electricity generation, head office and back-office energy-related operations, energy transmission and energy innovation, efficiency and conservation.

Saint John is home to Canada's largest oil refinery; Canada's only liquefied natural gas terminal; two international natural gas pipelines; integrated pulp, paper and tissue manufacturing facilities; two large-scale thermal generation plants; and Canada's third most active marine port by tonnage and, of course, the Point Lepreau

Nuclear Power Generating Station sits about 50 kilometres away from the city.

The Saint John region supports billions of dollars in annual energy-related exports from New Brunswick to the New England States and beyond and is a significant contributor to the New Brunswick economy and Canada's overall energy exports.

The region's energy-related exports will increase exponentially should the Energy East Pipeline Project be approved to carry crude oil from Western Canada to the Irving Oil refinery and an export terminal located in East Saint John. From a public safety perspective, the City of Saint John is responsible for the emergency response planning activities associated with an increasingly complex and diverse industrial cumulative risk profile unlike anything in Eastern Canada, if not all of Canada.

The city recognizes the economic importance of having Atlantic Canada's only nuclear generating station, Point Lepreau, as part of our region's energy infrastructure. The facility provides high quality employment opportunities for over 800 local residents and NB Power has established itself as an important part of our community.

The company contributes generously to

community events, organizations, and groups that are the lifeblood of our city. Point Lepreau also provides baseload clean, non-emitting electricity for local and New Brunswick residents, businesses and industry.

We would like to express our appreciation with respect to Point Lepreau Nuclear Generating Station's ongoing commitment to communicating on a regular basis with the city and local citizens regarding a broad range of operational and planning matters.

Senior city representatives have also had the benefit of visiting the station to receive firsthand updates with respect to its operation, performance and ongoing safety and environmental initiatives.

We have confidence in the high level of oversight and the comprehensive safety monitoring standards applied to Canada's nuclear sector as well as NB Power's commitment to consistently meeting these standards.

Our confidence with respect to NB Power's nuclear safety record and operating procedures has its foundation in Point Lepreau's longstanding relationship with the Saint John Fire Department with respect to emergency response planning, preparation and response which has been in place since the facility was commissioned in 1981.

This relationship has led to further

collaboration with respect to training, where today the Saint John Fire Department is one of the primary on-site emergency response training providers at Point Lepreau, providing in excess of 4,500 man hours of first response training over the last two years.

This collaborative training model focuses on both high level individual and team competencies and has been recognized during recent CNSC assessments.

Notwithstanding our successful relationship, the increasing complexity within our own community's response hazard profile has created new challenges for our operations which we need to consider.

Further to our emergency planning, preparation, and response collaboration challenges and building on the theme of continuous improvement, the Saint John Fire Department and EMO services are embarking on the introduction of a new Community Awareness Emergency Response or CAER initiative in partnership with our region's key industrial and energy stakeholders.

The city's CAER initiative is intended to introduce a new level of collaborative emergency planning, preparation and response for each of the industrial sites within the region that present an elevated level of hazard and risk to our community.

The four level CAER program captures our

existing public safety planning commitments and reflects positively on the current operational relationship as well as our hope for an enhanced planning preparation and response relationship that that the City has with Point Lepreau and NB Power, including scripted rehearsal of postulated incidents, which we have called CAER 1, ongoing collaboration with respect to practical fire ground training, which we have called CAER 2, and the Saint John Fire Department's emergency response agreement with Point Lepreau, which is somewhat akin to CAER 3.

Our goal to enhance these three planning commitments is consistent with our vision to collaboratively move to an even richer and more fully integrated emergency planning preparation response process with each of the city's key industrial energy hazards. Collaboration is what we refer to as CAER Level 4.

As background to the Saint John Fire Department CAER partnership initiative which was recently adopted by Saint John's common council it's important to understand the impetus for this evolution of our approach to emergency planning preparation response.

The City of Saint John hazard risk profile is not only significantly diverse but further complicated in that the hazard risk facilities are mostly integrated within our urban setting.

Recent emergency events across North America have highlighted the need for a better approach to understanding emergency response needs in all of our communities. Indeed, the current level of planning preparation response has the opportunity to be enhanced through technology and process improvement.

With this in mind, the Saint John Fire Department and Saint John Emergency Measures organization undertook and examined and we investigated the best practices of how to manage municipal and industrial interface risk. Our ongoing investigation of municipal and industrial emergency response interface spans across Canada, locations in Hamilton and Sarnia, Ontario as well as Edmonton, Calgary, Wood Buffalo, of course Fort McMurray, Strathcona County, Alberta.

It was during this analysis where we were introduced to the community awareness emergency response initiative. The community awareness emergency response initiative as first discovered was centred on a number of industrial partners collaborating on emergency planning preparation response framework. The principle of industrial partners participating in a coordinated collaborative methodical emergency response program resonates as the best possible practice for future emergency planning preparation response for our

communities.

We have a need to develop a long term comprehensive CAER partners program to ensure the sustainability of our fire service and proper response capability for the most difficult situations that could arise in our community. A long term CAER partners program is also vital to what could be a very complex response to Point Lepreau which is outside our jurisdiction, of course. This could pose a major threat to Saint John if the situation should occur.

As we develop our CAER partners program we would like to engage NB Power in the program on a long-term basis. The four CAER levels engagement currently planned are:

- CAER Level 1 is a comprehensive emergency planning preparation response program anchored by simulation experience testing and full real-time access to emergency plants. CAER Level 1 would enable Saint John's fire command staff to create and/or exercise existing emergency response plans and provide simulation practice for all hazard sites within our domain;

- CAER Level 2, in addition to benefits provided in CAER Level 1, the CAER partner would collaborate on a more fully-developed Saint John fire training academy to reflect emergency response training

needs and the industrial hazard risk profile in the community. A limited number of potential CAER partners will be identified for our discussion how to ensure the community's emergency response training facility can help our responders acquire and sustain critical emergency response competence;

- CAER Level 3 in addition to the benefits provided in CAER Level 1 and 2, a very few number of potential CAER partners will be identified for discussion on how an industrial emergency response team can be enhanced through collaboration and integration. The Saint John Fire Department CAER Level 3 embraces the collaborative depth and thoroughness that was observed in the response networks in Western and Central Canada. CAER Level 3 is the establishment of a municipal industrial-based response team fully integrated to all municipal resources;

- CAER Level 4, Mayor Darling's written submission to the CNSC respectfully requesting the opportunity to intervene in this licence renewal -- this licence renewal public hearing references a tiered four-level CAER Level 4 program. The fourth and most beneficial level is the synergistic or collaborative effect that happens should they combine two or more of the CAER levels or, most importantly, the power of relationships

that are created when organizations and people do their best.

The Saint John Fire Department mission to minimize the loss of life and injury and damage to the environment through effective, efficient, traditional and non-traditional by rescue services champion through our vision of anticipating the challenges of the new millennium through progressive planning and leadership provide an effective innovative response to evolving fire and rescue needs of the citizens and industries of Saint John.

As part of fulfilling our mission and vision, we are introducing the CAER partner program as a means to get the Saint John Fire Service more deeply engaged with the needs and special requirements of our major industrial facilities over the long term.

Our engagement -- just about 30 seconds, Mr. President -- our engagement at NB Power on emergency response training on support services through the years has been excellent. It has shown us the level of preparation that they undertake. We look forward to them joining us as full partners in our CAER program so that we are both prepared to the highest degree possible.

On behalf of the City of Saint John I would like to express our confidence in the safe operations of Point Lepreau Nuclear Generating Station by NB Power and

would respectfully request the Canadian Nuclear Safety Commission grant the renewal of the reactor operating licence.

Thank you for taking the time to discuss the opportunities associated with developing a community partnership beyond what we have today. We look forward to working with NB Power and Point Lepreau team in further elevating and involving our public safety planning preparation and response capabilities.

Thank you.

THE PRESIDENT: Thank you.

Let's open up for questioning. Mr. Tolgyesi...?

MEMBER TOLGYESI: I have one, Mr. President.

My understanding is that the City of Saint John was involved in the last emergency Exercise INTREPID 2015 as a site to evacuate those located to within a 20-kilometres evacuation zone. Now, do you have provisions or plans in case Saint John should be partially or totally evacuated?

MR. CLIFFORD: I'm sorry. Could you ask the last part? Do we have plans in case...?

MEMBER TOLGYESI: In case that it's not only a 20-kilometres evacuation zone but further should

Saint John be partially or totally evacuated?

MR. CLIFFORD: It's been a long time since we have actually discussed that type of a -- that type of an event for the City of Saint John. So you know that's part of the evolution we need to go through. We need to look at that event in a more complete way, I believe, from the standpoint of the impact that might happen to the City of Saint John.

MEMBER TOLGYESI: Do you work on that with NB EMO or naturally with NB Power?

MR. CLIFFORD: From an all-hazards perspective we've had discussions on what evacuation might look like. In our community we have actually put in place an evacuation plan, so a large-scale evacuation plan is part of what we have looked at. What we need to do, and this is part of why we are introducing CAER, is that we need to -- we need to take a look at the specific industries that are within our community and say, if something were to happen how would that evacuation plan unravel?

Right now we have an evacuation plan but we haven't looked particularly evacuating because of this, evacuating because of that, evacuating because of this. This is one of the gaps that we see in our community with respect to emergency planning. We have an evacuation plan

but we haven't applied that plan specifically to a type of response, a type of incident.

THE PRESIDENT: So I'm a bit confused. Are you not plugged into NB and then New Brunswick EMO?

MR. CLIFFORD: Absolutely.

THE PRESIDENT: So I thought that the New Brunswick EMO is a big plan for severe accidents that will cover Saint John. What am I not getting here?

MR. CLIFFORD: There is some disconnect and quite frankly -- and that's one of the reasons we need to evolve to a better way.

THE PRESIDENT: Okay, thank you.

Ms Velshi...?

MEMBER VELSHI: Thank you, Mr. President.

And thank you. So you were an active participant in Exercise INTREPID in 2015. What were some of the key learnings and areas of improvement that were identified for the City of Saint John from that exercise?

MR. CLIFFORD: We were not overly interactive in INTREPID. We were basically -- we were a participant but we were not a key participant and given the nature of what they were looking at, the 20-kilometres evacuation.

MEMBER VELSHI: So describe at a high level what was the level of your involvement in that

exercise then?

MR. CLIFFORD: Our EMO manager who reports to the director, which is within my role, our EMO manager participated.

And we had a lot of discussions on decontamination and those challenges on decontamination. We would have liked to have had a better role in INTREPID.

MEMBER VELSHI: So with the exercise being contemplated for next year, have you had any involvement in what your role may be for that one?

MR. CLIFFORD: I'm at a disadvantage now because I have not talked to our EMO manager. He's in Ottawa on another exercise -- on another training. So I don't know if -- I have not received any communication on the exercise contemplated for next year.

MEMBER VELSHI: Thank you.

THE PRESIDENT: Dr. McEwan...?

MEMBER MCEWAN: Thank you, Mr. President.

Thank you for the presentation. I was struck by one figure on the second page of the mayor's letter where you say that you provided in excess of 4,500 man hours of training over the last two years. That seems a very significant commitment on your part and potentially a burden on your part. At what stage do you run into issues of being able to provide that level if Energy East

comes, if something else comes into your area? How do you balance those resources and how would you look into the future to maintain that level?

MR. CLIFFORD: That's very insightful of you, Mr. Commissioner. First of all, before we go down too many kinds of paths, we have an excellent relationship with Point Lepreau.

But one of the things with the 4,500 man hours is their trust in us in helping to develop that onsite response team. So we actually use our training staff and some of my command staff who are former trainers. We are down basically hands-on and doing a lot of the practical training for that response team that's down there.

So one of the reasons we need to look, I believe, we need to look at the CAER initiative more fully, not just -- this isn't an initiative that was started with respect to the lands on Point Lepreau at all. This is within my own -- our own community in Saint John. It's just to your point. We need to -- we need to sort out some of the challenges around understanding how we intend to respond and how we intend to manage any of those types of events that happen in our community.

We would like to extend that initiative to our relationship on Point Lepreau. Again, that's part of

the challenge. Part of the challenge is we're an industrial city and we have been asked to prepare, we've been asked to create plans and prepare and be able to respond to a whole host of things. And we need to look at it differently because, quite frankly, some of the resources are limited. And some of those resources are limited within our municipality.

So we need to be collaborative. I believe a collaborative approach gets us to a better way.

And again, my initial focus along the whole introduction of care was our reflection on the hazards that are in our community right now. And I think there's a better way.

Again, they are adequate today. This isn't by any ways -- the introduction of care is by no means a cry for help. It's just a promise and a vision on a better planning and preparation response process.

We would like to introduce that to Point Lepreau NB Power. And I've got no reason to believe they wouldn't embrace it as much as I would want to embrace it.

So we do have challenges and that's why a better approach can help us deal with some of those challenges.

THE PRESIDENT: Point Lepreau?

MR. PLUMMER: For the record, Brett

Plummer.

We continue to work with the communities and we co-ordinate with Saint John. And understanding that this new care initiative is new, we will be glad to sit down at the table and figure out what we can do collaboratively to work forward on this new initiative.

THE PRESIDENT: Chief, the New Brunswick EMO is going to sit here either today or tomorrow -- tomorrow morning.

So what do you suggest I ask them?

--- Laughter / Rires

MR. CLIFFORD: Again, we have a tremendous relationship with N.B. EMO. So I'm not finding any fault.

Our role, my role in my community is to evolve and is to find those places where you might be able to get better.

We believe we have a role in those things that might impact Saint John.

And again, with all due respect to the process that they had with Intrepid, it was focussing on that 20-kilometre radius and hence that focus wasn't necessarily us. Sometimes when people think Saint John Fire, you think about flames, you think about fire truck. And, you know, that wasn't what it was about.

But again, maybe it's our fault in that

we're confusing in that Saint John Fire was a big part of Saint John EMO. And my role as the Director of Saint John EMO is we've got a manager who's very, very capable and my role is to build that team that can work with N.B. EMO.

I don't find any fault in what was done. I'm presenting today a care initiative that will be an evolution, I hope.

You've asked questions on Intrepid, you've asked for our involvement. It wasn't where I would have wanted to be. But I understand why somebody would look at it another way.

Again, I'm biased to my community. I'm biased to the things that will happen in my community and those things that will affect my community. I don't expect anybody else to have the same bias that I would have.

THE PRESIDENT: So I think I interpreted your intervention to mean that you need better co-ordination between the various levels of government here.

MR. CLIFFORD: I think there's an evolution. I think there's an evolution in emergency preparation and I think in many jurisdictions. I don't think we're alone at all. I know many of the people at N.B. EMO and they are extremely committed and dedicated. I am not finding fault.

THE PRESIDENT: Let me ask you a technical question.

What kind of communication technology and would NB Power and you guys have the same equipment? Your telecommunication devices will operate on site?

MR. CLIFFORD: If we were called to respond, the first thing we would do is make sure that communication is in harmony.

Point Lepreau is part of our response model. We would make sure that we're all communicating with the same tools.

The province itself is moving to a better communication model too and it's just taking some time in that we're all moving to digital radios which will allow us to communicate better.

THE PRESIDENT: So you are not there yet.

MR. CLIFFORD: Not in the province. But if we respond to the NB Power site at Point Lepreau, we're fine in communication.

THE PRESIDENT: Are you guys migrating also to the new technology?

MR. PLUMMER: Brett Plummer for the record.

We need to take a minute to answer that. We'll get back to you and find out exactly what we're

migrating to.

THE PRESIDENT: All right, thank you.

Ms Velshi.

MEMBER VELSHI: Chief, can you tell us what kind of radiation protection training your staff in your department would have so that they can respond appropriately to an event with New Brunswick Power if they were called upon to do so?

MR. CLIFFORD: Sure. Well, the set -- maybe I'll give you some background.

The Saint John Fire Department is one of two heavy hazardous materials response teams in the province. Part of the hazardous materials curriculum is indeed the impact and those things you would want to understand with respect to radiation.

One of our trainers -- at least 12 or 13 of our folks have been to CBRNE, which was an advanced hazardous materials training, first in Ottawa and then in Suffield. And then one of our folks actually belongs to an international contingent that teaches hazardous materials response.

And within hazardous materials response is radiation.

From the standpoint of decontamination, I'd much rather decontaminate somebody that was affected by

radiation than some of the chemicals we deal with.

So decontamination from radiation exposure can be easier.

And I'm not the technical expert. I have folks around me that are, but I do know that it can be easier than some of the chemicals you have.

I'm very confident in our ability to deal with decontamination.

We once did a significant research project with Research Development Canada on mass decon, decontamination. So the people that we would send as responders would certainly have the skillset.

And not only that, CNSC has certainly provided support to us on numerous -- Brian Wilson is my special operations, my major decontamination guru. He certainly has a lot of communication with respect to preparing for radiation events with CNSC and staff of -- well, basically the staff of CNSC.

We certainly have been offered support.

I don't feel there's a gap in that knowledge stream at all.

MEMBER VELSHI: Thank you.

And they would have had some station-specific training so they would understand what the layout of the facility is, and so on?

MR. CLIFFORD: Absolutely.

THE PRESIDENT: If I can piggyback on that, what about the general population, schools, hospitals in Saint John? Are they aware? Do they have any kind of knowledge about what needs to be done in case of an emergency?

MR. CLIFFORD: Absolutely. We work with the EMO. As part of the EMO team is having this conversation with Sharf Chowdhury, the Emergency Measures Co-Ordinator at Atlantic Health Sciences.

We've certainly had those connections on what -- we've had those discussions on what we would need to do.

So there is certainly that expertise at the hospitals.

THE PRESIDENT: Point Lepreau?

MR. PLUMMER: Brett Plummer for the record.

We have an answer to the communication question and Jason Nouwens will go ahead and give you that answer.

MR. NOUWENS: Thank you, Brett.

For the record, Jason Nouwens.

As part of our Fire Compliance Project in 2014 we did a site-wide fully integrated digital radio

communications system. So that system has full recordability and full integration with police, fire and security.

So we are completely capable of communicating with any system.

THE PRESIDENT: Is that the new digital system that first responders are migrating to?

MR. NOUWENS: That is correct. And we also have an instant command system on-site that uses the same system. So any responder that comes to the site, whether it's RCMP or fire departments, can integrate with our on-site system completely.

THE PRESIDENT: Thank you.

Mr. Tolgyesi.

MEMBER TOLGYESI: Yes. Do you have these communications also with other small communities, not Saint John, which is quite large with its capability? But the small communities.

MR. NOUWENS: If I understand your question, are you questioning whether we can communicate with the communities --

MEMBER TOLGYESI: Not it you communicate but in the case of emergency, you are saying you are moving to this digital communication.

My question is that Saint John has this

capacity probably. But the small communities around it, how do you communicate with them?

MR. NOUWENS: Absolutely. For example, the Musquash Fire Department has the same system that can integrate with ours as well. That is correct.

THE PRESIDENT: Chief, thank you for your intervention.

You have the final say here.

MR. CLIFFORD: Thanks so much for your time and thanks for listening to my comments.

THE PRESIDENT: Thank you.

We are going to break for lunch and reconvene at 1:15. Thank you.

--- Upon recessing at 12:10 p.m. /

Suspension à 12 h 10

--- Upon resuming at 1:19 p.m. /

Reprise à 13 h 19

MR. LEBLANC: Thank you. We're going to resume the Commission hearing, thank you very much.

THE PRESIDENT: The next submission is an oral presentation by the Maliseet Nation of New Brunswick, as outlined in CMD 17-H2.92. I understand that Mr. Letica will make the presentation. The floor is yours, sir.

CMD 17-H2.92

**Oral presentation by the
Maliseet Nation of New Brunswick**

MR. LETICA: Good afternoon, Mr. President and Members of the Commission, and welcome to the Welastekwiyik ceded traditional territory.

I would like to acknowledge the elders, the chiefs, Chief Hugh Akagi of the Passamaquoddy and Chief Ron Tremblay of the Maliseet Grand Council, and community members in the room.

To my left we have Fred Sabattis for the Maliseet Nation at Oromocto who works in the First Nation consultation. To my right we have Zeke Crafton-McDonald from Oromocto First Nation, also works in consultation.

My name is Russ Letica, I'm the Consultation Coordinator and Assistant Land Officer for the Maliseet Nation at Madawaska and I'm here to speak on behalf of the Welastekwiyik Nation.

Before I begin, I would like to make it clear that the information that I will provide in this presentation is not a complete presentation of the issues and concerns of the Welastekwiyik Nation. It is meant only as a high-level overview of issues and concerns raised

within our communities to date based on the limited engagement that has occurred and the limited community members that have participated in that engagement.

The Maliseet people have occupied the lands and waters of what is now called New Brunswick since time immemorial. The Saint John River Basin, the Welastekw, specifically has been a key part of our traditional homeland and we are physically and culturally connected to it. As the meaning of our name implies, we are the people of the beautiful river.

Our communities and members have a shared common territory, history, culture, language, as well as Aboriginal and treaty rights. We share a deep relation with our traditional territory and have embraced a duty of protecting it and ensuring that its use is in keeping with the values and beliefs of our ancestors, and in the best interest for future generations.

We are the signatories to the solemn to sacred treaties of peace and friendship. These peace and friendship treaties were entered into between the Maliseet and the British. They encourage peaceful relations between the parties. Their sole purpose was to end hostilities and encourage cooperation between the British and the First Nations in other parts of Canada treaties involving ceding or surrendering First Nations' rights to land. Our treaties

did not involve the ceding or surrendering of our rights, our lands, or our resources.

But in the past century our lands, waters and resources have been increasingly exploited to the point that they are in serious danger. We have experienced considerable loss in our livelihood through this exploitation. Lands and resources have been and continue to be taken up through settlement, resource extraction such as forestry, fishing, agriculture, environmental degradation, and highly restrictive government regulations.

As a result of the cumulative effects of these projects and activities in our traditional territory there are few accessible areas remaining for traditional use and valued resources, which has caused significant challenges to the Maliseet people, our economies and our culture.

Despite these challenges, we Maliseet people, the Welastekwiyik people, are a strong and resilient people and our culture, traditions and way of life have persisted into the present.

We continue to have a deep spiritual connection to your territory and continue to hunt and trap, fish and engage in other harvesting and traditional practices in our traditional territory.

But our use of lands and resources and our

culture, tradition and way of life continue to be threatened by new industrial activities in combination with the cumulative effect of past projects and activities.

The Point Lepreau Nuclear Generating Station is located within the area of New Brunswick where the Maliseet Nation currently conducted initial traditional land and resource use activities. The Maliseet Nation of New Brunswick includes the communities of Madawaska, Tobique, Woodstock, Kingsclear, St. Mary's, and Oromocto. Our communal lands represent only a small portion of our geographic identity. We use a much larger area than our communities, which includes the region where Point Lepreau Nuclear Generation Station is located.

The Maliseet hold peace and friendship treaty rights, including treaty harvesting rights. These treaties did not involve the surrender of Aboriginal title. Therefore, the Maliseet also hold Aboriginal title as well as Aboriginal rights within our territory.

Maliseet traditional land and resource use patterns in New Brunswick have been influenced by a number of processes and events. European contact became frequent in this region in the early 17th century and four centuries of colonization and non-Aboriginal land use has shaped what Maliseet traditional land resource use patterns look like today, and they include land and resources being taken up

by settlements, their forestry, fishing, agriculture and other industries (i.e. flooding of the Snowshoe Islands and Meductic, and important Maliseet village and burial sites, as well as erosion of Ekwpahak Island as a result of the construction of the Mactaquac dam, vast tracks of Crown lands in Maliseet territory sold as industrial freeholds for forestry, et cetera).

A subsequent decline in the quality, quantity and diversity of resources central to the Maliseet livelihood (i.e. restrictions of salmon fisheries in Maliseet territory since 1996 and extirpation of caribou in New Brunswick as a result of settlers and their industries, and government restrictions placed on Maliseet traditional land resource use such as constraints on hunting, fishing, cutting of wood, et cetera).

The Marshall Supreme Court of Canada decision, 1999, established that the Mi'kmaq, Maliseet and Passamaquoddy have treaty rights to earn a moderate livelihood from commercial fishing.

First Nation commercial fishing in the Bay of Fundy, including the Lepreau area, include pelagic species such as herring and mackerel, shellfish such as lobster, crustaceans, scallops and sea urchins, and ground fish. First Nations' fisheries revenue in the Bay of Fundy in 2016 was in excess of \$36 million. The Maliseet's share

of that \$35 million represents a significant source of income for each Maliseet community.

The commercial species outlined above are also collected by the Maliseet for food, social and ceremonial uses as other species such as the soft shell clams that are collected in sandy inter tidal areas. Although a traditional use study of Maliseet use in the Point Lepreau area has been completed, some examples of Maliseet land use in the Lepreau area include the collection of ceremonial and medicinal plants, harvesting of fish, camp sites and ceremonial sites.

Impacts from Point Lepreau on Maliseet traditional land use. Maliseets used the Lepreau region to exercise their rights prior to the construction of the Point Lepreau NGS. Due to existence and continued operation of Point Lepreau, the Maliseet can no longer use this area.

Maliseet land users fear the environment radiation created by Point Lepreau and avoid harvesting and occupancy activities in the immediate area. The Maliseet are also concerned about how the releases of radioactive liquid effluent and thermal energy to the marine environment as well as impingement and entrainment will negatively affect fish species harvested both through their communal, commercial and food, social and ceremonial licences.

The Maliseet feel stress and anxiety about the potential of an accident, malfunction or unplanned event. This stress is ongoing as long as the facility remains in operation. Environmental contamination from an accident or malfunction could further reduce the Maliseets' already limited harvesting areas and the already compromised fish and wildlife stocks upon which they depend on for exercising their harvesting rights.

The potential for adverse impacts to the commercial fisheries is of particular concern to the Maliseet since the commercial fishing in the Bay of Fundy is a critical component of their communities' economies.

In conclusion, the Maliseet were not consulted before Point Lepreau was constructed, and this five-year licence renewal has not triggered at full-scale consultation. The Maliseet expect major engagement at the next major decision point for this facility. In the meantime, the Maliseet propose the following recommendations.

Point Lepreau should fund a Maliseet community-based monitoring program for environmental radiation around Point Lepreau as well as impingement and entrainment studies. Monitoring with direct Maliseet participation in the data collection would foster Maliseet confidence in the data obtained. This may, in turn, help to alleviate some of the concerns about potential

contamination or adverse impacts.

The facility should fund a study to document impacts of the Point Lepreau NGS and the Maliseet communal commercial fisheries. NB Power, the CNSC, or the province, should fund a more comprehensive study of Aboriginal historical and contemporary land use in the Lepreau area.

Thank you for your time.

THE PRESIDENT: Thank you.

Let's jump right into questions. Who wants to start? Ms Velshi?

MEMBER VELSHI: Thank you, Mr. President, and thank you for your presentation.

Let me start by asking Point Lepreau on what your comments are around lack of engagement and involvement with the Maliseet Nation?

MR. PLUMMER: Brett Plummer, for the record.

I'll ask Charles Hickman to respond please.

MR. HICKMAN: Thank you, Brett. My name is Charles Hickman, Director Environment and Emergency Planning for New Brunswick Power. I'll answer your question, and if you need some further detail, Andrea Allen, who is our Director of Aboriginal Affairs, can also

provide some more details.

I'd like to thank the MTI for their presentation, and very much I hear what they're saying. The comments that we did not consult during the project's construction, that would be an accurate statement. During the early days, 1970s, consultation wasn't, I would say, a recognized activity at the time. This was before the Supreme Court ruling.

In 2003, prior to our major decision around renewal of the station and refurbishment of the station, we did provide both funding and opportunities for engagement with both the Maliseet Nation and the Mi'kmaq Nation at the time through the representative organizations who were in place at that time; that was the UNBI, the Union of New Brunswick Indians, and through the representative organizations.

Recognizing some of the groups have changed over time, some of the players have changed over time, we have basically since the 2000s been in regular contact with both Maliseet Nation representatives, the Mi'kmaq Nation representatives and also the Passamaquoddy representatives.

So there's been engagement, there's been reaching out to the communities through the representative organizations since the early 2000s.

We've also brought and invited both individuals and representative organizations to come to the station, visit the station, walk around the points, have access to see what is there from their own particular interests. We've had elders, chiefs and members of the community.

So we've reached out, we believe we have open and engagement activities that are in line with the work that we're doing with the Maliseet and Mi'kmaq Nations. That work is an ongoing path, travel, learning from both parties I believe.

There was reference to some of the work that's been done around the Mactaquac Generation Station, which is one of the hydro electric facilities. That work over the past couple of years I think has also helped educate ourselves and the First Nations about how we do business, how they see us and how they see us upon their land.

So I think this is an ongoing path, which will continue evolving over time.

MEMBER VELSHI: Having heard their concerns that they're not happy with the state of affairs, as they exist today, what more do you think needs to be done to address their concerns? I'm looking particularly at the concern they have on the impact on fisheries, on an

accident, and I know your three pillars were engagement, employment and education. I just wondered, having heard this, what are you going to do differently to address their concerns?

MR. HICKMAN: Charles Hickman, for the record.

Some of the next steps on the path is to apply for *Fisheries Act* authorization, so as part of that process there'll be further reach out and engagement with the First Nations to understand their particular concerns, their particular objectives to understand how that *Fisheries Act* authorization will be reflective of those interests.

We've recently signed an agreement with the Maliseet Nation with regards to ongoing consultation activities, engagement activities, learning opportunities. So I think specific activities are going to be tied to the *Fisheries Act* authorization.

We've opened the opportunity for education and awareness around radiation, around the operation of the station to try to address some of the underlying concerns around the actual nature of the station and the operation. That would be an ongoing activity for a long time to come and it would be a two-way activity. We would be learning and we would be providing information to try to answer some

of the questions.

Concerns of ongoing monitoring. I'm sure here during the next couple of days we have extensive monitoring programs that would suggest -- and I think validated by independent non-staff -- that show that we do not have an impact, a significant impact on the environment either from the radiological or from the non-radiological point of view.

That doesn't detract from the fact there is a concern that I hear that I recognize and it is both a First Nations concern and I think it is reflected in some of the other presentations we will hear in the next couple of days.

So there is work that NB Power has to do to provide information and awareness to basically try to allay some of those concerns, but it is to provide information to allow them to come to their own conclusions on the impact of the station.

MEMBER VELSHI: Thank you.

I will ask staff to comment and then I will come and ask you what your thoughts are.

Staff, any comments on what you have heard both from the intervenor as well as Point Lepreau staff?

MR. FRAPPIER: Gerry Frappier for the record. I will ask Caroline Ducros to give comments.

But in general, as you know, we certainly -- with respect to the environmental questions they have, we certainly have tools available to us to ensure we understand environmental effects.

With respect to the much broader sort of history of the situation they find themselves in, that's a little bit more difficult for us.

DR. DUCROS: Dr. Caroline Ducros, I am the Director of the Environmental Assessment Division, for the record.

Yes, we heard the concerns of the Maliseet First Nation and we have -- CNSC staff has really made a commitment more recently to strengthen the relationship, strengthen the engagement actions. So we met in person on February 1st and again in teleconference on April 24th to discuss some of the issues that were raised in the intervention and how we might move forward.

So in terms of one of the recommendations that I heard just mentioned was the confidence in the data collection, engagement in the monitoring, funding of the studies. For more details on sort of the Participant Funding Program and the flexibility of that, I can turn that over to my colleague in Ottawa, Adam Levine, who is ready to answer that.

But I did want to stress that we really

are committed to moving forward with the Environmental Monitoring Program that we undertake. There is a cyclical renewal of the environmental risk assessment and we would like to have the indigenous knowledge and concerns as part of that application and what we review. And, yes, there are also opportunities for engagement in terms of the Independent Environmental Monitoring Program.

MEMBER VELSHI: So from you I think what I have heard is the next big opportunity is when you go -- I'm sorry, this is to Point Lepreau -- is when you go for your DFO authorization and the engagement that you have made a commitment you're required to with them to discuss the impact and the offsets and get their input on that. So that's imminent; is that correct?

MR. HICKMAN: Charles Hickman for the record.

Yes, that is correct. I would like to stress that is only one part of our ongoing relationship-building with the First Nations. As you pointed out, we have a three-prong strategy. The *Fisheries Act* is really one small element of that which will allow us to focus discussion around particularly the station's impact on fishermen in the area.

MEMBER VELSHI: Thank you.

So any comments from you on what you have

heard? Clearly, both Board staff and the licensee have indicated a strong commitment to not only that they hear your concerns but they are actively working and appreciate that there is more that can be done and are committed to doing more. Any comments on that?

MR. LETICA: Russ Letica for the Welastekwiyyik Nation, for the record.

I did hear what both said and I'm very grateful for the words that we just heard. We do have a relationship with both parties moving forward. I would only recommend that moving forward that possibly we are allotted the time to do what we need to do, where we feel that we were rushed for the presentation to present to you today and we feel that the funding that did come was not adequate to provide full-scale concerns from the Nation. As I said, this was just a highly overview. We had six weeks and a limited amount of funding to put this report together to be able to have our experts work on the submission that we did and to put it together. So I don't believe that the Commission has a full view of the Welastekwiyyik Nation's concerns. You have a highly overview of what's going on and I feel good to hear that both sides are agreeing to continue to work with the Maliseet Nation and hopefully we can move forward in getting those studies put into place. The most important

thing to us would be protecting the land and water for the future generations to come and I have an issue when we have a ceiling above our head on how that's going to be done. Thank you.

THE PRESIDENT: So just let me understand. You did sign an MOU, I understand, with Point Lepreau recently, and between now and the next major hearing five years from now presumably you also have a chance every year. Point Lepreau is to come in front of the Commission and tell us how they are doing. So under the MOU, are you going to have structure, like periodic meetings, discuss particular issues, particular files, particular things in a systematic way so it's not done at the last minute four years from now, the next time the Commission appears here? You have an opportunity. So I thought that was what the MOU was all about. Is that not what's going to happen from here on?

MR. LETICA: Russ Letica from the Welastekwiyyik Nation, for the record.

The MOU that is signed between NB Power -- and we are very happy that that MOU was signed -- is not for just Point Lepreau. NB Power has many projects on the move and the MOU was signed so that we don't have to come back to the proponent on each of the projects to ask for funding. So the funding that is put in place under the MOU

is not for Point Lepreau, it's for the many projects that NB Power is moving forward on within our traditional territory. Thank you.

THE PRESIDENT: Thank you for that. I didn't understand it and I'm very happy that you are dealing with Point Lepreau -- NB Power on many, many issues, but our concern is nuclear. So what I'm trying to understand, are we going to move the agenda forward on nuclear and nuclear-specific issue? So what I don't understand, and we have seen it in other facilities where there is a structure, that the three parties, CNSC, the indigenous people near the facilities and the operator get together periodically -- and I'm not talking about ad hoc, I'm talking about, I don't know, you decide, once a year, twice a year, three times a year, and deal with ongoing issues and whatever needs to be resolved and studied. Why don't you set up a structure like this or make it more formal in consultation? Why don't you -- Point Lepreau?

MR. PLUMMER: Brett Plummer for the record.

There is a process with NB Power and it will include Point Lepreau in the future. We will sit down on a regular basis. We will work with the Maliseet Nation on their concerns. It will be forced through on basically the *Fisheries Act* in that regard. But also we heard the

concern also about the environmental monitoring and we would like to sit down with them as well and work something out amongst us that both of us can respect each other and it will be valuable to both of us.

THE PRESIDENT: So the same question for the CNSC. If there will be a licence granted for the next five years, what are you going to do about formalities here between now and then?

MR. FRAPPIER: Gerry Frappier for the record.

So we have committed that we will be setting up regular meetings, certainly on the environmental monitoring, but on the other things if that's the nature of it. If you want more information on that, we could ask Caroline Ducros to provide a bit more information.

DR. DUCROS: Caroline Ducros for the record.

Yes, as I mentioned, we really are trying to establish a relationship when we can understand the issues on a more holistic level and that includes environment. And we heard the concerns about stress about using the land, from the perceived threats of a facility. So the monitoring is a large part of building that type of confidence.

I also wanted to mention that as part of

the *Fisheries Act* Authorization there is an obligation, as Mr. Casterton mentioned in the presentation, to engage with First Nations on that *Fisheries Act* application, and NB Power are going to be doing some of that outreach and so will we.

And one of the facets of the *Fisheries Act* application that's particularly important to get viewpoints on is the offset policies which are to counterbalance any of the residual effects from impingement and entrainment, so we are hoping that these discussions can move forward as well. It is also another avenue for reporting back on how we are doing in between licensing periods, is the Regulatory Oversight Report, and we can report back to the Commission on how those discussions are progressing if you wish.

THE PRESIDENT: I'm just wondering whether the Fisheries and Oceans person wants to comment on all of this discussion.

MR. HICKMAN: If I may while DFO gets organized. From NB Power's point of view, we recognize and understand entirely the fact that we have to engage with First Nations, we have ongoing meetings with First Nations as part of the MOU. We have been doing those meetings for a long time now, so we understand and we definitely will be reaching out to have that engagement. We have already

mentioned with both NTI, with Passamaquoddy and the other Nations already that we will be applying for the *Fisheries Act* Authorization. So that process, we understand that, we recognize that and I completely concur with the need to do that. So that will be happening this coming year.

THE PRESIDENT: Fisheries and Oceans, any comment?

MS HALL: Paulette Hall, Fisheries and Oceans Canada.

First, I would like to reiterate to the committee members that we have an agreement with the Canadian Nuclear Safety Commission by which the *Fisheries Act* is now -- the fish and fish habitat impacts are assessed by our colleagues from that Commission. However, when it comes to issuance of the *Fisheries Act* Authorization, we will follow the process which will include First Nation consultations. We have worked with NB Power before on several projects, we will continue on this one. And with the help of our colleagues from the Canadian Nuclear Safety Commission who have been studying this application with regards to the impact on fish and fish habitat, we are confident that we can issue that authorization once all the consultations are complete.

THE PRESIDENT: Thank you.

Dr. McEwan...?

MEMBER MCEWAN: Thank you, Mr. President.

And again, thank you for the presentation and for the submission which I enjoyed reading. Thank you.

I was struck by a couple of lines on the second to last page of your submission and I can quote them:

"Maliseet land users fear the environmental radiation created ... feel stress and anxiety about the potential of an accident, malfunction, ..."

We have heard this two or three times as we have gone through licensing hearings around the country. So we are where we are. These figures I think are real and understandable. What would you like to see put in place going forward to try and help alleviate those fears, to try and build a level of confidence that the systems are safe, that the systems are appropriately monitored and that your livelihoods ultimately will not be at risk? Is there any pathway forward that you can see that would help us ensure that happened?

MR. LETICA: Russ Letica for the Welastekwiyyik Nation for the record.

There are -- we -- to remove those anxieties and stress and fear, we would need Maliseet

people working within that monitoring program. For decades we have heard in our territory about procurements, about employment, as our Nation still faces the highest unemployment rates. So jobs, the jobs that were promised through procurement, they never facilitated. I don't say that by 100 percent. I say that by looking at the unemployment statistics within our communities.

So to answer your question what would secure the Welastekwiyik Nation to help alleviate some of that stress would be to put First Nation monitors trained, funded and trained, into the monitoring of this area. The only thing I think that will help within our communities is to hear it's a safe place coming from our own people and that regulatory boards are proponents. I think that would be the answer and that was why it was part of -- in the conclusion of one of our recommendations, to have Maliseet boots on the ground -- excuse me, Maliseet moccasins on the ground --

--- Laughter / Rires

MR. LETICA: -- part of that process, to become that partner.

You know, I do feel the need to say that with NB Power that relationship has started. We have a respectful dialogue at the table. We are not that far apart. We do believe with people like Andrea Allen,

Anthony Bielecki, Austin Paul, people that come to the table at these meetings, it's hard not to form a relationship when you come to the table and speak and I guess what it is, it's the beginning of it.

I wish every one of my files I worked on in consultation was as respectful to move forward as it has been with NB Power. It doesn't mean that we are in agreement with them, but we do appreciate and respect the relationship that is now forming. And I would like to extend that also our friends at the Canadian Nuclear Safety Commission, to Adam Levine, to Kimberly Noble to Doug Wylie, who have heard, have done the best they could for us, though we would have liked to have seen more funding to be able to bring more issues forward. We have a problem with lack of funding. Consultation begins with capacity funding in place, NB Power realizes that, and NB Power has sat with the Maliseet Nation and we are working through those now and we are moving forward. Thank you.

MEMBER MCEWAN: From staff or from NB Power, any thoughts?

MR. PLUMMER: Brett Plummer for the record.

So we do respect the Maliseet Nation and we will continue to work with the Maliseet Nation to respect their concerns and try to alleviate their fear. We

hear that and we think really the only way to get through that is through education and part of that education may be a partnership in some form in the future. So we will go through our process, we will engage and it won't be just every five year for licence renewal and we will work with the Nation to try to alleviate those fears.

MR. FRAPPIER: Gerry Frappier for the record. Perhaps I will get Mr. Adam Levine to add a comment.

But in general, as you have heard, we are respectful of the situation and looking for opportunities to increase engagement. We are setting up a structure that will allow us to do that while at the same time being cognizant of the limits of what we can pragmatically undertake.

But Mr. Levine, perhaps you want to add?

MR. LEVINE: Thank you, Mr. Frappier. This is Adam Levine for Aboriginal Consultation Advisor and Participant Funding Program Administrator, for the record.

So I just want to reiterate that the relationship with First Nations and the relationship we are building with the Maliseet First Nation, as Russ talked about, is very important to CNSC staff and we have really put a lot of effort in advance of this licence renewal to build that relationship and start building more trust

around our regulatory oversight and ensuring that the environment is protected and that aboriginal rights and interests are protected as well.

We have talked about this with Russ previously, but moving forward we are definitely committed to working together to find different mechanisms to bring that information directly to the communities so that they can hear it, to the Elders, to the youth, to leadership, to ensure that they are involved and have their voices heard. And we have a number of different programs they can get involved in and learn more, such as our Independent Environmental Monitoring Program and also we have our Participant Funding Program which is very flexible and can offer things such as funding to do independent studies around environmental monitoring and traditional land use.

So we are definitely willing to work with the communities on this and work with New Brunswick Power as well as a partnership and we are definitely looking forward to moving forward with these communities. Thank you.

THE PRESIDENT: Thank you.

Monsieur Tolgyesi...? Pas de question?

Ms Velshi...?

MEMBER VELSHI: I have a follow-up question for Mr. Levine.

One of the concerns that the intervenor raised was the lack of adequate time to submit a more comprehensive submission. Any comments on that?

MR. LEVINE: Adam Levine for the record.

So as part of the licence renewal process CNSC staff have standard processes in place to ensure that indigenous communities get the information they need as early as possible. So for this licence renewal, as soon as we received the application from NB Power we ensured to notify the communities about the licence renewal application, the available participant funding as well as the Commission hearing process.

There are also timelines in place around the amount of time available for review of Commission Member Documents. So as soon as they became publicly available before the Part 1 hearing, we ensured that the communities received the Commission Member Documents in January and we followed up multiple times as well to make sure that they had received the information, had a chance to review it and if they had any questions -- and we made sure that CNSC technical staff were available to answer any questions.

So we have definitely put forward significant effort to make sure that they receive the information. We also understand that, you know, to engage

communities -- and the Maliseet have a number of communities they represent -- that it does take a lot of time and effort, but I think that we have definitely tried our best to make sure they had enough time to review.

MEMBER VELSHI: So you have me totally confused because what you have said is we have done everything we can possibly do, but we understand that that is not sufficient for them. So clearly something more or maybe some more time, but how do you make it easier for them to make sure that they have adequate time?

MR. FRAPPIER: Gerry Frappier for the record.

As Mr. Levine was talking about, those are the rules with respect to engaging in a relicensing activity. So relicensing activity, as you know very well, has some strict scheduling, some strict allowance, and really it's about providing opportunities for the public to speak. I think what we are talking about here is a more deep engagement that isn't just about ensuring that the Maliseet Nation can provide some input to licensing. I think what we are really talking about is an ongoing partnership with respect to environmental monitoring and some other things.

As we have mentioned, we are setting up to have some structured approach to having regular contacts.

That will then allow for it to have more time and we will see as to what depth of engagement that is appropriate. But the licensing process has its objective and I think in this case it's not just participant funding that is needed if we are going to go beyond just getting input during relicensing.

MEMBER VELSHI: Thank you. I think it would be fairly worthwhile to monitor are there other opportunities to allow them to make as good a submission as they think is necessary.

Over to you.

MR. LETICA: Russ Letica for the Wolastoqiyik Nation, for the record.

Earlier we saw in a presentation that 64,000 and some change was available for funding for the three Nations. The Maliseet's proposal was \$75,000. Our budget was a stringent budget and we tightened our belts on it to be able to get the experts that we needed to review the documents. So, reviewing of the documents never happened for us, we don't have the technical ability to do so.

So, we were actually awarded 23,000 and some change, and that's why I brought up the point that we did the best we could with the amount of funding that was available.

I can't speak on the other proponents or the other two participants in that funding, I can only speak on the Maliseet. It wasn't adequate enough. If we would have started our work in January and then come to find out in March that we were only getting 23 of the 75 that we budgeted for, we would be in major trouble. We wouldn't have been able to pay those experts that work for us.

So, we didn't find out about the amount of funding until I believe March. I could be mistaken, I don't have my notes in front of me, but it wasn't adequate time once we were told the amount of funding that we had.

We had the experts lined up, we had the work ready to go, we knew that we had to hit the ground running to be able to submit and to be part of this process for the first time. The problem came within the inadequate amount of funding and then the time we had to do the work once we were told what funding we would get.

Thank you.

THE PRESIDENT: Dr. McEwan.

MEMBER MCEWAN: Thank you, Mr. President.

I was particularly interested in the section you wrote on the historical context and some of the comments that you made that there was very little either archaeological or anthropological study done in the middle

past, if I can call it that, up to the...

Is there any ongoing research being done or any ongoing research being planned to try and better define the archaeological context -- that historical context? I mean, I'm interested in what you've been able to pull out and I suspect it would be a bigger story if you had more time.

Do you have plans to try and do that and to try and build a more cohesive structure, picture?

MR. LETICA: Russ Letica for the Wolastoqiyik Nation, for the record.

Absolutely. Thank you for bringing that up.

Oh, we've heard that the Maliseet were not consulted at the time of the construction of Point Lepreau. I would venture to say I have not seen that there are archaeology records for the Point Lepreau area. Our concerns would be the archaeological sites along the shorelines which were never done.

So, moving forward, it's pretty powerful for us that you would bring that up because on break the Maliseet were talking about that. We need to move forward.

You're right, there is a story to be told and the story must be told by the Wolastoqiyik people. And these studies, these archaeological reports and things is

just going to take the adequate capacity to produce. There's a story to be told here, it needs to be told. We have not found that funding yet to tell the story of our unseated traditional territory, to document it and we hope, moving forward with this proceeding and proceedings to come in the future, that the Maliseet people can do the work and put their story together for future generations to come.

Woliwon.

MEMBER MCEWAN: Thank you. And so, presumably, there will be opportunities with universities or with other collaborators to try and build the framework to do that?

MR. LETICA: Russ Letica for the Wolastoqiyik Nation.

Absolutely. We have many scholars within the university from our Nation working and there's many pedals on this bicycle pushing us forward. We are very resilient and persistent people and there's no doubt that we won't get to that full story.

Woliwon.

THE PRESIDENT: Thank you.

Ms Velshi? Mr. Tolgyesi?

Okay. Thank you. You have the last word, anything else you want to add to leave with us.

MR. LETICA: Russ Letica for the

Wolastoqiyik Nation.

I want to thank you for your time today and for hearing us. It's a different type of communication when you sit with people who look you in the eye and who hear you and ask questions to your concerns.

And I thank this Commission, I thank the Panel, I thank NB Power and I thank CNSC for working with us to get to where we are today. We have a long way to go, but I am more secure today that we're going to get there and I thank you once again.

THE PRESIDENT: Thank you for sharing.
Thank you.

I'd like to move on to the next submission which is an oral presentation by the Canadian Nuclear Society as outlined in CMD 17-H2.12 and I will turn the floor to Mr. Ozemoyah. Please proceed. Actually, Dr. Ozemoyah, sorry.

CMD 17-H12.2

**Oral Presentation by
Canadian Nuclear Society**

DR. OZEMOYAH: Good afternoon. My name is Peter Ozemoyah, I'm the President of the Canadian Nuclear Society.

The Canadian Nuclear Society was formed in 1979 and it's a not-for-profit organization of 8,000 members all across Canada.

I'm here this afternoon with Mr. Colin Hunt on my left, who is the Secretary of the organization, and Mr. Peter Easton on my right, who is the Communications Director of the organization.

I will hand over to Colin to give our brief on the presentation. Colin...?

MR. HUNT: Thank you very much, Peter.

Members of the Commission, my name is Colin Hunt. I'm Secretary of the Canadian Nuclear Society and I would like to thank the Commission for the opportunity to appear on the matter of the renewal of the operating licence for the Point Lepreau NGS.

I would say at the outset that the CNS supports the renewal of the Point Lepreau operating licence without reservations.

The CNS submission submitted to the CNSC earlier regarding the re-licensing touched on three main areas of interest to our Society: The importance of Point Lepreau to the future of CANDU technology; the importance of Point Lepreau to the Province of New Brunswick; and the extensive upgrading of safety performance in recent years, both during and after plant refurbishment.

With respect to plant improvements, I would bring to the attention of the Commission that of the 10 CANDU-6 reactors in Canada and around the world, Point Lepreau is the only operating CANDU-6 reactor in Canada. It has been and continues to be the template for plant operations, maintenance and plant upgrades as they become needed over time.

Point Lepreau is important because it ensures that Canada retains the lead in developing and implementing these lessons in those areas.

I would also note that Point Lepreau serves as a strong indicator that a CANDU-6 nuclear plant, operating successfully already for more than 30 years, can indeed continue to perform well and that it can be enhanced to meet modern safety standards, not simply those that were in place at the time it was built.

As noted in our submission, there have been a host of plant upgrades in recent years to meet beyond design basis events and in our main submission you will have noted a, I believe, complete list of all of those upgrades.

It should be observed that the importance of Point Lepreau goes well beyond the Province of New Brunswick. Its experience shapes greatly the future course that other CANDU-6 plants around the world will also

experience over time. It will also shape the future of CANDU technology beyond CANDU-6.

Turning to the needs of New Brunswick, the importance of Point Lepreau to the province cannot be understated. Point Lepreau provides nearly one third of the province's electricity supply and it cannot be readily replaced, except at great cost from other sources. Low-cost, reliable supplies of electricity are essential to the prosperity of everyone in New Brunswick.

Looking to the future, a former highly respected Premier of New Brunswick has already stated publicly that New Brunswick must look to the future of its electricity supply. Two of its largest fossil fuel stations, Coleson Cove and Belledune, are aging and will need to be replaced over the decades to come. Accordingly, he suggested, a second nuclear power reactor at Point Lepreau was perhaps the best answer for New Brunswick's future electricity supply that is both reliable as a source of baseload electricity and significantly reducing gaseous emissions associated with coal and oil-fired plants.

The CNS observes that Point Lepreau has created a deep pool of knowledge and expertise in nuclear operations over the past three decades. This pool will be of enormous value to New Brunswick in developing any future nuclear capacity in the province, should that be a decision

in the future that New Brunswick would make.

With that, Mr. Easton and I will be pleased to answer any questions that you may have for us.

Thank you.

THE PRESIDENT: Thank you.

Who wants to start? Ms Velshi?

MEMBER VELSHI: Thank you, Mr. President, and thank you.

So just an observation more than a question. Over my last five years with the Commission, I don't believe you've appeared before us for any other nuclear power plant licensing. I just wondered what made Lepreau unique other than you did say, you know, it is sort of a lead CANDU 6 technology and it's importance to New Brunswick.

But what makes this one different?

MR. HUNT: Colin Hunt, for the record. Ms Velshi, I must correct you on this. The Canadian Nuclear Society was happy to appear at the re-licensing hearings of Pickering, Bruce and Darlington.

MEMBER VELSHI: Sorry. Sorry about that. And thanks for clarifying that. Okay. So, clearly, losing my memory here.

--- Laughter / Rires

THE PRESIDENT: But just -- just to

defend, Ms Velshi was a recent phenomenon. It only started a year or two ago, if memory serves. So you are half right.

--- Laughter / Rires

MEMBER VELSHI: So, on page 3 of your written submission where you give a list of all the improvements that have been made, one of the concerns that we hear very often from many intervenors post-Fukushima is the focus tends to be very much on the technical equipment side as opposed to the human side.

And I wondered if you had any comments on that because even as I look down your list, it, again, focuses very much which for, you know, engineers in particular, seems to be the easy way out.

So can you comment on that? On the culture, people side?

MR. HUNT: Colin Hunt for the record. Ms Velshi, I would agree with you. Your perception is accurate that it does focus on the technical side.

I would suggest to you and other members of the Commission that, if you are going to address a perceived threat to safety, that address must start with technical performance.

I could, for example, in -- hypothetically address safety by telling people pretty stories about how

everything is wonderful and safe. Those pretty stories only are true and only have significance if there is a technical basis for saying so.

In a sense, you have to have the technical understanding in the execution of actual engineered safety improvements first before you can go on to tell people the story.

And so that's why we focus on the technical side, because that's what's truly important and must be done first.

MEMBER VELSHI: I'll turn to staff to comment on that.

MR. FRAPPIER: Gerry Frappier for the record. And certainly I agree that we want to ensure that, if we're improving safety, that it is actually an improvement in safety and it can be counted on.

And so, certainly, systems and engineering approaches is what we would like to see the most and that's usually what you suggest in any system analysis is you sort of say improve the systems.

But I think it's also a bit misleading. We always put these technical terms down and really usually it's a talk about a system but those systems come with engineered support from a human factors perspective when they're designing the thing to make sure that the team of

operators or whoever has to maintain it can, in fact, do that.

And they also come with operating procedures, emergency procedures, whatever else is required to ensure that, from an operational perspective, these systems are not just names of technical things but they're actually pieces of hardware that can be operated as required and I'm sure New Brunswick Power could go through each one of these and talk about how much of the training, how much of the new procedures have to be written and so there is certainly a human component to these things, although they do sound very much like technical systems.

MEMBER VELSHI: Thank you and that was exactly the kind of message I was making sure that we got across, that the improvement efforts have very much looked after the people and you heard about their culture, recent surveys as well. Thank you.

THE PRESIDENT: McEwan.

MEMBER MCEWAN: Thank you, Mr. President. I'd like to follow up on that because, again, if I look at some of the other interventions, they are suggesting that there may not be enough in this panel of improvements to have improved the safety sufficiently.

So do you have any comments on how what you have described on this page, page 3, as the

improvements, how do you decide what is needed to create that next level of safety? And, as you implement them, how do you confirm that what you've done is correct?

And I guess the final piece is, if you wish to comment, with a couple of the intervenors who've said, "This isn't going to make it any safer," you're looking at this from an outside perspective, from a perspective of expertise and experience. Can you help us just sort of square that circle?

MR. HUNT: Colin Hunt for the record. Yeah. These sorts of issues would be sorted out between the plant operator and the regulator, first and foremost.

I would like to note right at the up front that Canadian nuclear operators and the Canadian Nuclear Safety Commission were on top of and discussing the parameters of what was needed for post-Fukushima refits and starting to implement them long before the regulatory agencies of other nations had even finished their analysis, let alone considered what was going to be done.

So we don't owe favours to anyone. The Canadian industry and the Canadian regulatory structure was well on top of this years ago, ahead of much of the rest of the world, I would suggest.

But the conversation starts between the regulators and the operator indicating what kind of things

are necessary to do and what kind of things are deficient or may be insufficient with the plant's architecture as it then existed? That's where the conversation has to start.

MEMBER MCEWAN: So then I guess the follow-on to that is you start the conversation, you do the actions. How do you then perform the QA on what you have done to ensure that you've created that additional order of magnitude or additional level of safety?

MR. HUNT: The question of QA goes beyond the scope of what the CNS would be competent to answer and that question should be directed towards the proponent.

MR. FRAPPIER: Gerry Frappier for the record. A couple of things. I think that it's important to note that, as Mr. Hunt mentioned, as part of the getting ready for refurbishment, a very extensive amount of safety reviews were done and that integrated safety review that I know has been in front of the panel a few times which is now turning into a periodic safety review is the sort of regulator's answer, if you like, to your question, which is how do we ensure we're always as safe as we can be? Where are all the opportunities for increasing safety? We want continuous improvement on a safety factor.

So even before Fukushima, Point Lepreau had gone through that process, had identified areas where there was potential to -- for safety improvements and, in

fact, planned that into their refurbishment.

So, as you'll remember when the lessons learned from Fukushima came out, which, in many, many areas were very similar to the lessons learned from having done the integrated safety review at Point Lepreau, Point Lepreau is way ahead of the game. They had already done most of those things.

And so that's one of the reasons we're very strong on the need for a periodic safety review.

The other aspect on the quality assurance is that, certainly from a regulator's perspective, and I would say the operators have a similar system, we do have international benchmarking that we go through. We do have international reviews that we invite to look at us and we do have the International Atomic Energy Agency, which is also progressing with what lessons can be learned from both operational experience and deeper, you know, studies into the science of accidents, if you like.

Having said that, I think Mr. Jammal might want to add or if I could ask him, he might want to add a little bit to that.

MR. JAMMAL: It's Ramzi Jammal for the record. I would like to complement Mr. Frappier with respect to a question about the quality assurance. As was mentioned, it was the integrated safety review which

resulted into integrated an improvement plan before they were allowed to restart.

They went through extensive testing to demonstrate that the functionality of the additional safety systems will take place.

So I just want to reiterate the fact that everything was tested, was inspected. Right next to me is the site Chief Inspector.

In addition to it, if we benchmark ourselves internationally, just coming off the convention of nuclear safety, Canada has reported, with respect to what you call a Vienna Declaration, and you ask a very valid question, the other intervenors are saying, "When do we stop? How good is good enough?"

Canada reported on the implementation of the Vienna Declaration where it calls for off-site impact to be as low as practicable, and Point Lepreau has installed many upgrades to the point that we're confident with respect to the impact off-site will be extremely minimal.

So that's one of the things that has been happening nationally and we benchmark internationally.

From a technical specification and safety upgrades perspective, Canada is leading the world with respect to the implementation of the Fukushima action plan

and more than just implementation, it is installation of key safety features that did take place.

THE PRESIDENT: So let me boil it down to a layman question, okay? And you heard me say it, I think, last time we were here.

Without those impressive list of improvements, can you tell me now that, under any doomsday scenario, you'll be able to shut down the plant so we don't have a Fukushima situation?

MR. FRAPPIER: Gerry Frappier for the record. So, based on our analysis and the work that's been done by Point Lepreau in design upgrades and management severe accident management and the EME, Emergency -- I forgot what that -- EME, which stands for?

THE PRESIDENT: Emergency Mitigation Equipment.

MR. FRAPPIER: You guys know better than I do now. The EME is in place that -- and the various analyses that we have done as to what are some initiating events, what is the progression that is possible in accidents? We view the potential for any kind of severe accident along the lines of Fukushima to be extremely, extremely small down to the point of being insignificant.

THE PRESIDENT: It was almost a "yes".
--- Laughter / Rires

THE PRESIDENT: Mr. Tolgyesi...?

MR. HUNT: If I might, Mr. President, I would remind the Commission that the principle of nuclear safety accepted in Canada and around the world is ALARA, as low as reasonably achievable. It is not ALAA, as low as absolutely achievable. It is up to the Commission like it is every other regulatory authority around the world to determine what is reasonable.

THE PRESIDENT: Mr. Tolgyesi...?

MEMBER TOLGYESI: I have just a very short comment. You define yourself as a non-profit organization of scientists, researchers, engineers or in the profession of. It's not quite as the order of engineers or body of engineers or practitioners but you are professional.

And that struck me to some extent when you were saying that you are looking for -- just for mostly, in general, I would say 95 percent for technical improvements and technical things. As professionals you -- in general these organizations, they have concepts about knowledge, about training, about human behaviour and I didn't feel that this is part of your main concern.

You were looking quite on the technical side, I understand. Most concerns are technically is it able to be done but it's done by people, by men and women and if they don't have the knowledge and don't have the

behaviour how you do that?

MR. HUNT: Colin Hunt for the record.

As a number of commissioners have noted, we have got a long list of technical improvements that were made to Point Lepreau NGS. In the industry and in nuclear science in general now, it is well understood that technical improvements are not simply equipment and hardware. They are a whole series of human factors, labour factors, training, all of which go into something we would call improvement of a fire protection program. So it's not simply installation of pumper trucks. It would be training of people to use them. It would be maintenance of them, operation of them. All of those things are all built in.

So in a sense the impression that we're only interested in hardware is, I think, somewhat misleading because when we speak of these things it's always understood that there is a huge chunk of ergonomics which comes with it.

MEMBER TOLGYESI: Well, maybe sometimes you should add these parts also to your speech so it will be clear, not necessarily just you know it's understood. It's understood but sometimes you should explain that you have that in mind.

Now, the Fukushima Action Plan is over. I mean it's done for several years now. Do you consider

there are some additional or new challenges for a nuclear power plant, something new but, you know, lots of things were done but something you discovered, something.

MR. HUNT: Colin Hunt for the record.

I agree with you that the scope of post-Fukushima changes to plant operations and equipment at least is over in terms of defining what was needed to respond to beyond design basis accidents. That does not mean that -- safety is not a static thing. Inevitably over time there will be other discoveries of changes that will need to be made. It is, I think, pointless to try forecasting in some crystal ball what these will be except that like life operating a nuclear power plant or, indeed, doing anything is to a very large extent an ongoing learning experience.

And I suspect that as long as people in the nuclear industry treat operations; even seemingly routine day to day operations as a learning experience, that will be one of the best defences there can possibly be against a repetition of a Fukushima accident.

THE PRESIDENT: Okay, thank you. Any final thought?

DR. OZEMOYAH: Thank you. I just want to use the opportunity to thank the Commission for this opportunity. I want to state again that we are a technical

society that presents facts from the scientific and engineering point of view. We may not present the facts from a general human point of view but we have to be sure that whatever facts we present are scientifically proven.

And thank you once again.

CMD 17-H2.37

Oral presentation by

Lorneville Mechanical Contractors

THE PRESIDENT: Thank you. I'd like to move now to the next submission, which is an oral presentation by Lorneville Mechanical Contractors, as outlined in CMD 17-H2.37.

I understand Mr. Dumouchel will make the presentation. Over to you, sir.

MR. DUMOUCHEL: I would like to begin by thanking the Members of the Commission for allowing me to speak today. My name is Styve Dumouchel. I am the President of Lorneville Mechanical Contractors.

We are a mechanical construction company established in 1977 with head offices here in Saint John, New Brunswick.

We currently have our head office in Saint John and we have satellite offices in Calgary, Edmonton,

Ottawa and Halifax. We employ approximately 180 staff positions and up to 1,300 trades at peak times of construction. Our staff is composed of professional engineers, accountants, quality control people and various other people. We specialize in mechanical construction in the oil and gas energy and pulp and paper industries.

Our history with Point Lepreau has been long and lasting. It goes right back to the original construction of Point Lepreau with one of Lorneville's first contracts being the supply of supervision for the retubing of the steam generators during the original construction.

Most notably, we were the contractor for supplying labour to Atomic Energy Canada during the recent refurbishment and the retubing of the reactor. And most recently, we have recently been awarded the maintenance contract for up to two years of supplying maintenance services at Point Lepreau.

At Lorneville we believe that safety is a culture. It is more than just following the rules in establishments but it's trying to establish a culture of safety with our employees. We are happy to say in our experience working at Point Lepreau that we feel Point Lepreau and ourselves share in that value.

We have always felt part of Point

Lepreau's continuous improvement philosophy. Most recently we have even been asked to analyze our workers' safety policies in comparison to how Point Lepreau manages their field construction workers to look for gaps in analysis from our programming to theirs to see if there's potentials for improvement on both of our companies.

I would, however, like to confirm that to the best of my knowledge in my experience with working with Point Lepreau I have never seen them knowingly violate or withhold any actions that would compromise the safety of our personnel at the facility whether it be training, monitoring, security clearances, FME training and monitoring, engineering work order compliances, quality control and quality assurance programs, we always have felt involved and properly trained. As you can guess, I'm here to speak in support of the renewal for their licence.

Safety is important but it is also not -- it is also important not to forget the economic impact of a facility like Point Lepreau to a construction company like ourselves. We appreciate the level of involvement that Point Lepreau has allowed us to participate in and their support of the local contracting community.

Through our involvement at Point Lepreau we believe we have become first in class in working in this industry and we have been able to capitalize on this by the

most recent award of the preplanning for the retubing of the feeder tubes at the Bruce Power Generating Station which we would not have done without our involvement at Point Lepreau.

It also has a trickle-down effect to some of our suppliers; as they have supported us, we have supported our local suppliers. And I would like to end by reading an email from one of our local suppliers to show you the impact that Point Lepreau has on the New Brunswick community. So this is an email sent to me by Jacqueline Estey and Jacqueline Estey is one of the owners of the Estey Group which are a local supplier here in Saint John. She just said:

"Hi. I just wanted to send you a quick note to say thank you for the P.O. for your recent purchase of FR coveralls."

"FR" is fireproof coveralls that are a piece of protective equipment we give to our employees.

"...It was a pretty exciting day here, smiles on all our staff. Our manufacturer in Edmundston is thrilled as well. They are hiring two new employees as a result of your order. Pretty awesome. That's three

New Brunswick companies involved in one order."

Thank you. That is all I have to say.

THE PRESIDENT: Thank you. Questions?

Dr. McEwan...?

MEMBER MCEWAN: Thank you for the presentation. I guess a couple of related questions. Do you have an opportunity to build training capacity through Point Lepreau or in collaboration with Point Lepreau and, if so, does that training and that level of training help you expand your business in the non-nuclear industry and across the country?

MR. DUMOUCHEL: So I would say yes in that question. Two specific examples I can give is probably the best way to describe it.

If we look at our safety personnel we for the past two to three years have been seconding safety people at Point Lepreau to participate in their program specifically within our field of service which is the construction services. And then we've been able to take those people and move them outside of that using some of the aspects they've learned around investigations and around culture change and apply them to other industries.

So we've used them, for instance, in the oil and gas industry. We've transferred some of those

people there.

In respect to the technical aspect of doing the physical work, I think most notably is our involvement in a joint venture with the work that is currently going on at Bruce. We would never have been able to participate in that without the training and the involvement of Point Lepreau.

Thank you.

THE PRESIDENT: Mr. Tolgyesi, questions?

MEMBER TOLGYESI: You said you have a two-year contract at Point Lepreau, a maintenance contract.

This is a special maintenance where nuclear protection, etc. is involved, or is it general? Because it depends on what type of work you have, you could shift the people from place to place, site to site, or otherwise you will need special training to do what you have to do at Lepreau?

MR. DUMOUCHEL: Yes. The current contract we're holding at Point Lepreau is a general maintenance contractor contract for non-nuclear code work. So the people involved in that would not be involved in any of the pressure boundary work that would currently go on at Point Lepreau.

That is a separate contract. It's coming up for bid in the near future.

MEMBER TOLGYESI: So when you say you had recently Bruce Power feeder tube replacement planning program, that's something which requires special training.

You do that at Bruce and you could use that in other sites?

Or to what extent could you use them, at Point Lepreau or Darlington or wherever?

MR. DUMOUCHEL: So because of our involvement in the past refurbishment of Point Lepreau, we were able to train a significant portion of our staff in pressure boundary work.

We formed a joint venture with another New Brunswick contractor and a large international contractor and that's how we were able to obtain the work at Bruce. So the people that we have supplied at Bruce have been specifically trained in refurbishment work.

They are currently not at Point Lepreau.

THE PRESIDENT: Are you participating in the Darlington refurbishment?

MR. DUMOUCHEL: Not at this time.

THE PRESIDENT: Okay.

MR. DUMOUCHEL: And I would like to add it's just the planning at this stage at Bruce. We don't have the actual feeder tube replacement. The contract is for the writing of the engineering work orders, estimating

the actual value of the project and developing some of the work methods.

THE PRESIDENT: Questions?

Thank you. Any final word?

MR. DUMOUCHEL: No. Thank you very much.

THE PRESIDENT: Thank you.

The next submission is an oral presentation by the CANDU Owners Group, as outlined in CMD 17-H2.14.

I understand that Mr. Dermarkar will make the presentation.

Over to you.

CMD 17-H2.14

Oral presentation by CANDU Owners Group

MR. DERMARKAR: Thank you very much.

For the record, my name is Fred Dermarkar and I'm the President and CEO of the CANDU Owners Group.

Thank you, President Binder, and Members of the Commission for giving the CANDU Owners Group, or COG, as we are often called, the opportunity to present our thoughts on NB Power's request for a licence renewal for its Point Lepreau Nuclear Generating Station.

I do not intend to repeat what we have

already submitted in the letter of support but rather to complement or amplify upon its content.

To start off, I would like to reflect a little upon the 7th Review Meeting of the Convention of Nuclear Safety.

This meeting, which was hosted by the International Atomic Energy Agency in Vienna about one month ago, from March 27th to April 7th, creates a forum for countries to convene every three years and report on their nuclear safety programs.

It's an opportunity to challenge areas for improvement and recognize good practices and performance in other countries' nuclear safety programs in an effort to continuously strengthen nuclear safety around the world.

There are two items from Canada's review report that I would like to highlight as I believe they are directly relevant to this hearing.

The first is that the international community cited Canada and the CNSC in particular with a good practice for its Participant Funding Program, which gives the public, Aboriginal groups and other stakeholders the opportunity to actively and meaningfully participate in the regulatory process.

This was very significant because it was only one of four good practices that were identified

amongst all the programs from the 79 countries who are signatories to the convention.

It is a reflection that this practice is unique to Canada.

And I make a point of it because it's notable because the significant participation that we are seeing here in this hearing is, in part, a direct reflection of this practice.

The second item I would like to highlight from the CNS report is that the international community cited Canada once again, and this time COG in particular, with good performance through its facilitation of an international weekly screening meeting to review low-level events.

A good performance is defined as a noteworthy program that has been implemented effectively and represents a significant accomplishment for the country.

The screening committee is composed of all the COG utility members, including the international members, and some suppliers to the CANDU community.

Its objective is to identify actions for further follow-up by utilities to prevent their reoccurrence in other plants.

NB Power staff participate regularly and

actively at this meeting, both sharing their experience as well as learning from others.

Although it's not uncommon for industries to learn from high profile events, this meeting is significant because it provides a forum for discussion of lower significance issues that plants face on a more day-to-day basis.

Close to 800 items are discussed each year by this group.

Discussion like this can significantly accelerate the pace of continuous improvement, particularly with respect to nuclear safety. And as an active participant in this program, NB Power both contributes to and directly benefits from this accelerated improvement.

Another item I would like to highlight is the leadership role that NB Power has played in enhancing nuclear safety, both domestically and internationally.

And Mr. Frappier touched on this point but it bears repeating.

Before the events at Fukushima reminded the international community of the importance of being prepared for the unexpected, of understanding how events not anticipated in the design basis might impact a plant, and of developing approaches to mitigate them, NB Power was already ahead of the curve.

Through PSA studies that NB Power had initiated several years before Fukushima happened, NB Power identified the potential consequences of severe accidents and initiated design modifications to mitigate them.

In this regard they led the world with respect to CANDU technology.

This included the installation of a containment filter venting system and the installation of expanded monitoring of its containment atmosphere to better understand the reactor state during the evolution of a severe accident.

And this is a key point for emergency preparedness response: being able to understand what's going on inside the reactor.

NB Power openly shared their learning with the other COG member utilities.

As a result, by the time the Fukushima accident occurred, Canadian utilities had already applied thought and analysis to severe accident mitigation and were well positioned to pull together a response plan.

This, together with a very solid regulatory Fukushima Action Plan developed by the CNSC, contributed to Canada having an internationally acknowledged comprehensive response to Fukushima.

COG spends about \$65 million every year on

CANDU-related R&D through its six R&D programs and joint projects. This amount is in line with the spending of the top 15 private sector research investors in Canada.

A significant portion of the spending relates directly to safety in the environment, and its objective is to either advance knowledge or develop innovative solutions.

Of its ten utility members only three contribute to all six COG R&D programs, and NB Power is one of those three.

NB Power not only contributes monetarily but its expert staff also participate actively on the steering committees that direct the work programs for the various R&D programs. And this makes NB Power an industry leader in advancing knowledge and technology to enhanced nuclear safety and environmental performance in CANDU NPPs worldwide.

Finally, COG hosts close to 200 events each year where it brings the industry together. These events vary from small group meetings to large international workshops.

As a core member of COG, NB Power participates in many of these events. And this gives many of its staff the opportunity to engage and network with their international and domestic counterparts in many

diverse areas of operation.

The end result is that although it is a single unit nuclear utility, through COG NB Power enjoys many of the benefits that come from being part of a large fleet utility and this further enhances their nuclear safety performance.

In summary, NB Power is a leader in continuous improvement and takes advantage of its membership in COG to accelerate improvement by learning from low-level events at other plants.

It has played a key role in understanding severe accidents and contributing to Canada's Post-Fukushima Response.

It continues to play a leading role in advancing technology to further enhance the nuclear safety and environmental performance of CANDU NPPs worldwide and it leverages its active participation in COG to derive the benefits that fleet operators enjoy.

NB Power has demonstrated a strong commitment to excellence in nuclear safety, environmental performance and nuclear operation. For these reasons, COG strongly supports that it be granted the five-year licence it has requested.

Thank you for your attention.

THE PRESIDENT: Thank you. Questions? Ms

Velshi.

MEMBER VELSHI: Thank you, Mr. President, and thank you and thank you for bringing us up to speed with some of the key outcomes from CNS and what it means for us in Canada. That's extremely positive news, so thank you.

So a couple of questions for where you said you actually get to see the more international performance, particularly with CANDU-6 being part of a bigger fleet of CANDU-6 reactors. Other than age-related issues, how does the Lepreau plant compare with others? I'm particularly interested in the regulatory regime and what impact does that have from where you sit on the three parameters you just spoke about; nuclear safety, environmental performance, and operations? Do you see the regulatory regime having a very large impact on those outcomes?

MR. DERMARKAR: Thank you, Dr. Velshi. It's a good question. I will share with you an observation that I think might answer the questions, but if it doesn't please come back with a follow-up.

I visit our international members, each of them, I try and visit them once a year, to talk about how they can make better use of COG products. Invariably, one of the key questions they always come back with is has this

been accepted by the CNSC? If the answer is yes, it makes a night and day difference.

So, typically, what happens is they want to see whatever technology development we've made through COG, they want to see it go through the rigours of the licensing process here in Canada, whether that be through Point Lepreau, and it quite often is, or one of the other domestic members. They want to see that it's been proven through that process before they will entertain implementing it in their plants.

So in that regard, they hold what we're doing here in Canada as the standard before moving forward with similar projects.

Does that answer your question?

MEMBER VELSHI: It does, part of the way. In fact, it goes a long ways in answering that, because that shows the high credibility that the CNSC is held in by the other jurisdictions.

But if you were to talk about just performance in those three areas, how does Lepreau rank with the other CANDU-6 reactors; operations, nuclear safety, and environmental performance?

MR. DERMARKAR: So we don't actually -- there are very few parameters where we compare the utilities side by side. So we don't have an environmental

performance index per se. So I can't tell you how they compare, because we don't have a common benchmark.

Typically, utilities measure their environmental performance in concert with what the regulatory requirements are in their specific jurisdictions. So for us, for example, we care very much about fish impingement and entrainment and so on, we have a number of COG programs that are looking to mitigate those. But that is not as big an issue in the international community as it is here in Canada.

The one parameter that we do measure side by side, and it's easy to measure, it's very objective, is capacity factor. Since its restart, Lepreau's capacity factor has improved steadily. What that reflects is the fact that since restart it has been able to identify and correct post-restart issues that it had encountered.

Beyond that, I would really have to defer to Lepreau to talk about its performance. But capacity factor, I want to add it is an important measure, but by no means it cannot be correlated to environmental performance or directly to nuclear safety performance.

THE PRESIDENT: Dr. McEwan.

MEMBER MCEWAN: Thank you, Mr. President. Two questions; one I think will be quick, the other might be a little longer or more difficult.

At the bottom of page 1 you identify an award to a Point Lepreau engineer, Jennifer Lennox?

MR. DERMARKAR: Yes.

MEMBER MCEWAN: What was it for?

MR. DERMARKAR: So the Electric Power Research Institute, like COG actually, its focus is on R&D. R&D is only beneficial if it's actually used in the plant. It's an operationally-focused R&D program, it's not an academically-oriented R&D program. So what EPRI does every year is it looks for who has taken a leadership role in implementing the new R&D that it has developed. This is important, because there's a risk associated with being the leader in implementing R&D technology.

So in this particular area, Lepreau was recognized -- Jennifer Lennox was recognized for being a leader in implementing, being first out of the block in implementing new R&D that EPRI had developed.

So that in itself is meaningful because it shows that if the management is not oriented towards implementing innovation, if it's satisfied with status quo, it will be much more difficult for workers in the plant to be innovation leaders.

So this award is a reflection not just of Jennifer, but it's actually a reflection of the whole Lepreau organization because they are encouraging their

staff to be technology leaders, to be leaders in implementing innovation in their plant. I view that very very positively.

MEMBER MCEWAN: Thank you. Now a little more complex question. At the top of page 2, and your number 1, Post-Fukushima Action and Safety Analysis. You basically say they made the following five improvements and the result was -- in particular, the first two sub-bullets: nuclear safety was enhanced; emergency preparedness was enhanced.

As I read this I was frustrated that there was this happened, therefore this was the outcome because. It would have been very helpful for you to say, particularly as sort of the coordinator, if you like, or the TK person of the group, what actually did those implementations allow to happen that improved safety? Does that make sense?

MR. DERMARKAR: I think it does. Let me take a shot at answering it. Again, if I don't answer it fully, please come back.

So what we did post-Fukushima through COG, COG developed what was called the CIIT, the CANDU Industry Implementation Team, and it was CIIT specifically focused on post-Fukushima response.

What that CIIT did -- it was established

within a month or less of the event on that order, like very shortly after the event -- what they did was they identified what are the top priority issues that we need to go after even before we understand exactly what happened in this event? They reached agreement amongst the group as to what needed to be done.

So, for example, the emergence mitigation equipment was a key outcome from the CIIT regarding this is one important action we need to take, and they started to implement it almost immediately; develop provisions for EME.

Eventually, when the CNSC Fukushima Action Plan came out they amalgamated what the CIIT was doing together with the Fukushima Action Plan, and through COG they came up with a listing of all the modifications that every utility was doing and they developed a matrix, both domestic and international, to show who had implemented what, and then what experience they'd had in the implementation.

So by so doing, by having this community of practice where on a very frequent basis, I can't recall how frequently the meetings were, I think they were monthly or they could have even been more frequent at the beginning, the group coalesced and came up with solutions that moved us very quickly in terms of implementation.

Lepreau was an active member, they were an equal partner together with the other particularly domestic utilities. The domestics did lead the fleet on this. The internationals followed, but the domestics did lead.

So there were many things, like when you go into that matrix there are many items on that matrix. You'll recall the Fukushima Action Plan had 30-some odd items. I'm going on memory, I don't remember exactly, but it was on that order, 30-some odd items that all had to be addressed, and there were some additional things that the utilities did.

So I didn't want to go one by one through these, because it was really a collective, and Lepreau was there every step of the way participating and also implementing what the group as a whole had agreed to.

MEMBER MCEWAN: Okay.

THE PRESIDENT: Mr. Tolgyesi.

MEMBER TOLGYESI: Merci, Monsieur Le Président.

You were talking about applying research which COG and the Electric Power Research Institute is involved in. But what about fundamental research? Is and, if so, how to and to what extent the COG is involved in fundamental research? How do you manage that?

MR. DERMARKAR: The focus of our program

is predominantly on applied research. The funding for COG is provided exclusively by the utilities, we get no government funding. So we're a not-for-profit organization, but we're funded exclusively by the utilities.

So the research needs to focus on what they view as the top priority issues. There's a limited amount of funding, needless to say.

Just this year we are putting into place something we call a strategic R&D program. And unlike the vast majority of the R&D that we do in COG today, which is focused mostly on a three-year time horizon, to solve problems within a three-year timeframe, this strategic R&D program focuses more on a 10- to 15-year or even longer time horizon.

So by definition, if you are familiar with the term "technology readiness level," TRL, the TRL scale goes from 1 to 9, where 1 is fundamental research and 9 is ready to apply in the field. And COG has traditionally done research, maybe in the 7, 8, 9 range. What we are doing with strategic R&D is pulling that down and bringing it maybe towards more around the 5 or 6 range. We are not pulling it all the way down to the 1, that is beyond our scope.

Now, so that's new and we are ascribing about -- about 15 percent of our R&D program is spent on

this strategic R&D program that has a lower technology readiness level and a longer timeframe for implementation.

In addition to that, COG spends around between three quarters of \$1 million and \$1 million a year on collaborative research projects with universities. So we are investing in work being done by academia that is also typically at the lower end of the TRL scale. So in that regard, we do engage to some extent in research that is towards the lower end, but the vast majority of our research is very much applied because there are enough regulatory issues, environmental issues and operational issues that we are spending all the money that we have and we could spend a lot more if our members wanted to give us some more.

--- Laughter / Rires

MEMBER TOLGYESI: Could you tell me, what is your success rate? Because in research, I mean you could share research --

MR. DERMARKAR: Yes.

MEMBER TOLGYESI: -- but you should find that's the main objective of those who are operators and who are funding. So do you have any --

MR. DERMARKAR: Yes, I do. We have some precise numbers on this. So given that it's applied, we expect a very high -- we use the word "utilization rate"

and so what we do, after we have completed the research -- so first of all, we do research that the members say we want this research done. When the research is complete, the end result that you get may not be exactly what you expected, so we go back and ask the members, was this useful, are you likely to use it or are you definitely going to use it? And the utilization numbers, the most recent ones that we have, indicate that the members say about 88 percent of the time they are either very likely to use it or definitely use it. So the utilization rate is high, and again that is a reflection of research being done at the high end of the technology readiness level.

THE PRESIDENT: Thank you.

Ms Velshi...?

MEMBER VELSHI: Thank you.

What do you see if -- Lepreau has come here asking for a five-year licence renewal. What do you see as sort of key challenges -- here is a plug for more research for you -- facing them in the next five years that may not have been articulated in their application?

MR. DERMARKAR: So the challenges when -- at COG we don't look so much at individual utility challenges, because if it's only one utility that wants the work done, we typically would not be doing that work. What we look for are common challenges. So we look for

industry-wide challenges because that brings in multiple funding and that is the COG model. The whole basis for COG is shared funding for shared solutions for common problems.

And so where we are spending -- so if I was to change your question to where are we spending the most money, it's a bit of a different question than what you are asking, but where we are spending the most money at COG right now is on fuel channels and understanding how far we can take the life of fuel channels before we need to refurbish the fuel channels. And there is a very strong interest from our members in Ontario, from our members in Korea, in Romania, in China, that have not yet done refurbishment, in understanding how far you can take the life of the fuel channel.

The other area of significant interest relates to what we call the critical heat flux for different axial flux shapes and this is better to remove conservatisms or remove uncertainties in safety analysis.

Those are two of the biggest areas. We have some big areas in the environment, they don't cost as much, but for example around entrainment and eggs and larvae of fish and so on, we are doing a fair bit of work there as well.

MEMBER VELSHI: I think what I was trying to get at is with Lepreau being a single unit and maybe the

internationals may not be as interested in some of these opportunities, do they get a back seat as a result of it? And clearly, fuel channel is probably not a priority for them having gone through refurbishment. What falls off which would be important for them?

MR. DERMARKAR: Okay, that's a great question and it's much more focused, so I have a better understanding of where you are going.

A couple of years ago at COG, in fact it was in March of 2015, almost exactly two years ago, we formed something called the C6 Fleet, and the C6 Fleet was for all the CANDU 6 reactors worldwide. Somebody earlier today mentioned that our 10 CANDU 6 reactors worldwide, only one of them is here in Canada and the needs of the C6 Fleet may not be identical to the needs of the big players in Ontario and in the past those needs sometimes got a little bit overshadowed. So by pulling all the C6s together, it raised their profile.

The C6s meet regularly. The next meeting in fact is going to take place June 1st. The Chair of the C6 Fleet is sitting behind me, it's Mr. Paul Thompson, and what the C6 members do when they get together, first of all they share operating experience, what are the common problems that they are all having. Then they discuss what work do they want to do together to solve those problems.

A key member or a key -- not member, a participant in the C6 Fleet is SNC-Lavalin, because it is the OEM for all 10 of those reactors. So they are at the table a good part of the time. Sometimes the C6s just want to meet by themselves in an in camera session. When it's not an in camera session, CANDU Energy is there -- SNC-Lavalin I should say, and they are also helping to identify what solutions they can bring to the table.

And finally, beyond CANDU Energy, there are things that can be done by other suppliers and COG is also discussing with the C6 Fleet where we can help. And some of the biggest issues probably -- and Paul can correct me if I'm wrong, but one of the biggest issues is obsolescence. All these plants are getting older and they are all facing the same obsolescence issues, so how to replace the parts, what's the best way to replace the part and come with a common solution to the common obsolescence problem.

THE PRESIDENT: Okay. Okay, thank you.
Last thought.

MR. DERMARKAR: Thank you very much for the opportunity. It's an honour to speak on behalf of the CANDU owners and to be here today. Thank you.

THE PRESIDENT: Thank you.

--- Pause

THE PRESIDENT: Okay.

MR. LEBLANC: Thank you.

For those following the agenda, we are just doing a small switch between the next two presenters. Just a question of time management so that we can spend as much time as we can with Mr. Dalzell's presentation and there was not enough time before break. So thank you very much to the two participants for agreeing to that switch.

--- Pause

CMD 17-H2.24/17-H2.24A

Oral presentation by

Saint John Naturalists' Club Inc.

THE PRESIDENT: The next submission is an oral presentation by the Saint John Naturalists' Club Inc., as outlined in CMD 17-H2.24 and 17-H2.24A.

I understand Mr. Wilson will make the presentation. Over to you.

MR. WILSON: Thank you, Mr. President and ladies and gentlemen. My name is Jim Wilson and I am representing the Saint John Naturalists' Club, a local organization formed in 1962, with approximately 100 members.

This presentation is going to take us in a

little different direction, I think this time. I want to round out some things that happened at the Point that a lot of people may not be aware of, including this Committee.

First of all, I want to make it clear that I am not an expert in nuclear energy or generation or plant safety. I am a retired professional accountant, CPA/CMA, but I have a lifelong interest in birds and natural history in New Brunswick.

And secondly, I want to say that the Saint John Naturalists' Club that I am representing supports the renewal of the power reactor operating licence for Point Lepreau and we are pleased to be able to do that.

Now, our club, our 100 members or so and its membership have maintained a Bird Observatory building at the tip of Point Lepreau since 1995. That's 22 years of observations of birds passing up the Bay of Fundy.

The Observatory regularly hosts a number of our members as well as other naturalists from various parts of New Brunswick, and a good part of New Brunswick, by the way. Those visitors voluntarily assist with seabird migration research during several weeks each spring and fall.

During the course of operating the Observatory our club has developed a very positive and longstanding relationship with NB Power and the Point

Lepreau Nuclear Generating Station over these past 22 years. Management and staff at the station assisted with setting up the building originally in 1995 and since then they have been extremely cooperative by arranging security clearance for more than 250 volunteers and with scheduling visits by some of those volunteers on a daily basis during the spring and fall seabird migrations. And there is just a window of migration in spring and fall. This ongoing relationship with NB Power is vital to our club's continuing research work.

Now, the data we generate there at the Point is used by the Canadian Wildlife Service of Environment Canada for the management of East Coast seabird populations, and the data from Point Lepreau suggests that some seabird species may be declining by as much as 3 to 4 percent per year.

Now, why are we there? Why would we go to the tip of point Lepreau and look at birds beside a nuclear plant? Well, Point Lepreau is a strategic research location and continued research access is essential. Now, in early spring hundreds of thousands of seabirds instinctively begin migration northward toward Arctic nesting grounds. Now, these birds spend the winter at sea all the way down to Florida and Georgia.

These are sea ducks and other seabirds and

they nest in the Arctic and they have been offshore -- and you can imagine looking at the map there -- you can see that they would be strung out all down along the shore and as the days begin to lengthen in the spring they instinctively begin to get that migration urge, so they start moving. But they follow the shore, they follow the coastline as they move north. And as they get near the mouth of the Bay of Fundy, its entrance acts like a gigantic funnel.

They are following the shore, the mainland shore of the East Coast, bringing most of those birds close to the mainland shore, where Point Lepreau is the most prominent finger of land projecting from the mainland coast. And you can see that the islands -- you can see Grand Manan Island there south of Point Lepreau, southwest of Point Lepreau, and the birds kind of funnel in between it and the shore and funnel right past the tip of the Point. So it's quite possible that the majority of the East Coast seabirds, all the seabirds stretching down to Florida, may pass Point Lepreau within sight as they follow the coast north in spring. It's an absolutely strategic geographical spot in all of East Coast North America.

Let's see. I will make sure I get my right slide here.

For this reason, Point Lepreau and

adjacent Maces Bay were declared an important bird area in 2001. This is a special designation by BirdLife International that highlights the locations of these places on a map of significant bird areas worldwide.

Since 2015 our club has partnered with the University of New Brunswick to host and mentor a Master's candidate in biology at the Observatory. This student is researching weather conditions that affect patterns of bird migration through the Bay as well as developing a methodology to more accurately estimate East Coast populations of certain species that use this important northward route. NB Power's cooperation by arranging security clearance and regular access for this Master's student is critical to the success of his project as well as ours. We hope to extend this opportunity to other students in the years to come.

Now, on another front, the nuclear station has taken a special interest in another project of our club, to conserve and research the monarch butterfly. That's a monarch butterfly there nectoring on a plant. This is a species at risk, status special concern.

Nuclear management has arranged for the planting of milkweed on the property of the plant and staff has assisted with the tagging of monarch butterflies. They are actually tagged in order to follow their migration to

Mexico at the Observatory as the butterflies migrate south to Mexico during August and September each year.

The data on migrating monarchs is shared with Monarch Watch, which is a research project of the Entomology Department at the University of Kansas dedicated to the protection and preservation of monarch butterflies.

Our club's monarch tagging project is one of only a handful in New Brunswick. Two of our butterflies tagged in the summer of 2012 were recovered in Mexico at the El Rosario Sanctuary where they overwinter. The following winter two of those butterflies had been tagged at Point Lepreau and each had flown a total of 4,251 kilometres -- that's 2,642 miles -- from Point Lepreau all the way to South-Central Mexico, and they are I think the only two I believe that have been recovered from Mexico that have been tagged in New Brunswick.

Point Lepreau appears to be the most important migration stop oversight for migrating monarchs in all of the province of New Brunswick. Its coastal location funnels the travelling butterflies out to the tip of the point -- now remember, they are going south in the late summer -- where several hectares of wild flowers bloom profusely in the fields there near the lighthouse, near the tip, during late August and much of September. That is the exact time the butterflies need flower nectar for energy

during their long southward migration, and they are just getting started, leaving Canada at that point. Once at the tip of the Point, the monarchs stop, feed and replenish their body resources before continuing on their way. Nuclear management is aware of the importance of blooming plants to the migrating butterflies and they ensure the flowers are not mown or disturbed.

Another reason why the Observatory at Point Lepreau is so special is that it is protected from vandalism. Vandalism is always a potential problem and we have seen that with other naturalist clubs in other parts of the province, any place where a building is located in a remote area accessible to the public. Unlike any other bird Observatory that we know of in all of North America, the Point Lepreau location is different. It has only one access road, access is restricted to only security-cleared individuals, there are security cameras present in the area and security staff patrols the area regularly. In addition -- this is a bonus -- the access road is plowed all winter, enabling naturalists and students to access it by vehicle right to the door.

So in closing, I want to emphasize that our naturalists have been visiting point Lepreau voluntarily over the last 22 years. We understand that safety is a fundamental component of everyday life at the

plant, the nuclear plant, and we are comfortable with the general atmosphere we experience while we are there. We have had great cooperation.

That's my presentation.

THE PRESIDENT: Thank you.

MR. WILSON: Can I answer any questions that anybody might have?

THE PRESIDENT: Okay. Well, let's test. Does anybody want to ask questions?

MR. WILSON: You don't have to ask questions, but it's entirely up to you and you are very welcome.

--- Laughter / Rires

THE PRESIDENT: Ms Velshi...?

MEMBER VELSHI: Oh, I couldn't resist that opportunity.

--- Laughter / Rires

MEMBER VELSHI: Thank you so much. That was extremely informative. I learned a lot from that presentation.

And this may be just anecdotal and you did mention that there has been a slight decline, though I think you may have called it significant, a 3 or 4 percent decline in migratory birds. Do you think that nuclear plant operations have any impact on the seabirds or the

monarch butterfly?

MR. WILSON: Not that anyone that I am aware is aware of. No, I don't think at all. There is an outflow we understand from the plant of warm water, but there is an awful lot of water coming in the Bay of Fundy, in and out, and it doesn't seem to have affected the birdlife in any way that we can see over that 22 years. Now, it was operating before we set up the Observatory, the nuclear plant was, so we really don't have anything to compare with before, but over the 22 years we have been present we haven't seen any changes. Because this is really a throughput place for birds. There are local birds that stay there all summer and breed in the Bay of Fundy, a lot of them actually, but it is a conduit, a major conduit for migration, as I told you. So we haven't seen any effect, any negative effects of any parts of the plant that we know of. No, I can't think of anything at all.

Any other questions?

THE PRESIDENT: Dr. McEwan...?

MEMBER MCEWAN: So again, thank you. Very interesting.

I guess this is a question for staff. Do you see any issues with sort of the broad security clearance performance for naturalists coming in? I mean they are not inherently part of the industry. Do you see

issues?

MR. FRAPPIER: Gerry Frappier for the record.

I have to comment that I'm sure it's the most protected bird observatory there is anywhere --

--- Laughter / Rires

MR. FRAPPIER: -- that's for sure. There is security protocols and whatnot in place that New Brunswick Power must follow as far as having people come onsite or not, and so actually I would defer to perhaps New Brunswick Power to talk about exactly what they do with respect to ensuring that the security is not compromised.

MR. PLUMMER: Brett Plummer for the record.

The individuals that visit the site are on our control area, they are not within the protected area. And there are security protocols for getting them around the site and we follow all the protocols for any visitor that comes onsite, there is no exception. So there is no threat to the immediate plant from a security standpoint.

MR. WILSON: And I might add, if I could -- this is Jim Wilson for the record -- that our people, all of us, have undergone police record checks, criminal record checks. And then the protocol is to get the pass at the Visitor Centre, then be let into the high

security area. We pass through that without stopping. We have an assigned route and we follow that very carefully, all of our people. And when we get to outside the security area, we move on out to the tip of the Point on the only road that takes us there. We are actually operating on DFO property. They own the tip of the Point where the lighthouse used to be, and that's where our Observatory building sits. So we are very, very keenly aware that we have to follow that protocol very carefully and we do that. Each of our people is highly aware.

MEMBER MCEWAN: Thank you.

MEMBER TOLGYESI: How many Lepreau employees have you converted to become bird observers or butterfly observers?

--- Laughter / Rires

MR. WILSON: It's an ongoing project.

--- Laughter / Rires

MR. WILSON: But we do have great cooperation. We have a lot of interest and it is very gratifying to see that, you know. When you have seabirds going by in the distance, little specs going by or not so far away, they are distant and people don't relate. But when you have a butterfly, when you can get a butterfly that you can hold in your hand -- we catch them with a net, they are nectoring, and we put these tags on through the

University of Kansas. But when you have a butterfly you can actually hold in your hand, that is the connection that people make and then the whole thought of this migration of the butterfly is going all the way to Mexico with a tag on that perhaps you put on, it's like winning the lottery if it gets there and is recovered, right.

--- Laughter / Rires

MR. WILSON: And so we record everyone's name that puts a tag on individually in our data so that if we get an indication that it has been recovered we can let them know whether the -- we will pick up the phone and call them right away.

THE PRESIDENT: Is the monarch still at risk?

MR. WILSON: Oh, highly. Yes, it is.

THE PRESIDENT: Because I thought there was a bit of a comeback.

MR. WILSON: Very minor. And how they know this is in the wintering areas in Mexico, they take aerial photographs of the monarchs that are on the trees there, because they gather, they aggregate on the trees during the winter and sort of quasi-hibernate there, and so they estimate the number of hectares of butterflies that make it there every winter and the numbers two years ago were the lowest in history. They came up a little one year

ago and then this past winter a little more, but still extremely low, like maybe 10-11 percent of what it would have been 20 years ago. So it's extremely low, but hopefully making a recovery. There are tremendous efforts underway. Mexico, the United States and Canada at the presidential level actually -- well, before Mr. Trump was elected --

--- Laughter / Rires

MR. WILSON: -- to have a program of enhancing habitat for monarch butterflies. So in a way we are doing a little of that at Point Lepreau as well, doing our part.

THE PRESIDENT: Thank you. Thank you very much for this. Any other final thought you want to share with us?

MR. WILSON: I just want to -- I appreciate the opportunity to share this because it is a dimension at the Point that most people aren't aware of and it takes a lot of cooperation to make this happen and we are very grateful for it.

THE PRESIDENT: Thank you.

MR. WILSON: Thank you.

THE PRESIDENT: So we will take a break and come back at 3:45.

--- Upon recessing at 3:26 p.m. /

Suspension à 15 h 26

--- Upon resuming at 3:46 p.m. /

Reprise à 15 h 46

MR. LEBLANC: We will now resume the Commission hearing and, again, for those following the agenda, there's a little change, a little switch so the Passamaquoddy and Mr. Dalzell have agreed to switch turns so thank you, Mr. Dalzell. It's twice in a row. Looking forward to hearing from you so thank you very much. Mr. President?

THE PRESIDENT: Thank you. So the next submission is an oral presentation by Passamaquoddy Nation is outline CMD 17-H2.73 and I understand that Chief Akagi will make the presentation. Over to you, sir.

CMD 17-H2.73

Oral Presentation by Passamaquoddy Nation

CHIEF AKAGI: I would like to thank the Woolastokiuk people for the opportunity to stand and speak in their territory. Thank you.

My name is Hugh Akagi and I am chief of the Passamaquoddy people in Canada.

I keep seeing a certain pattern throughout history within my territory, which might explain why our view of these proceedings would be different from that of the newcomers.

1604, arrival of strangers in our territory, French settlement, St. Croix Island. We were asked to save those strangers from scurvy, starvation, and cannibalism which we did.

The strangers never really went away resulting in displacement within our home.

1783, arrival of strangers in our territory, loyalist settlement in Beaver Harbour. We were asked to save those strangers from the very same fate as those earlier, which we did, resulting in displacement within our own home.

There are no Passamaquoddy today in Beaver Harbour.

1783, arrival of strangers in our territory, a ship bearing loyalists, too late for the crossing to England.

We were asked to save those strangers, which we did, resulting in displacement within our own home. Very few Passamaquoddy today in Qonasqamkuk.

Jump ahead to 1975. Arrival of another stranger in our territory. They call it nuclear power and

its child, nuclear waste.

I do not wish to save this stranger for it has the potential of removing me from my home.

Now, the strangers from before are no longer strangers yet I feel they may need to be saved yet again.

There seems to be no end to their folly of invading my territory at our expense. There is a book by J. Edward Chamberlain called "If This Is Your Land, Where Are Your Stories?" I have asked Willi Nolan and Grand Chief of the Woolastokiuk, Ron Tremblay, to share their stories.

MS NOLAN: Good afternoon. Greetings, members of the Commission. I give thanks to Woolastokiuk people for allowing our presence here today.

As many members of the Commission are already aware, I have been doing advocacy with Passamaquoddy Nation since 2010. They have always and do now refuse approval for Lepreau to continue and for very good reasons.

Please review our submissions of 2011 and 2012 where I submitted personally and as a member of the International Institute of Concern for Public Health our documents reviewed by a number of medical and scientific professionals.

Number one concern is health. The Canadian Nuclear Society recently, just outside here, admitted that they have nothing to do with the epidemiology. We know that the Canadian Nuclear Safety Commission does not have a roster of medical doctors relying on something called health physics, which is nothing to do with physicians.

The greatest risk because of nuclear is that it harms life at the atomic level, greatest risk being to children, adolescents and pregnant women and all coming generations of human and animal life.

The Dene Suline people with whom I still work are victims of the uranium mining, without which there would be no uranium industry, including Point Lepreau.

The Village of Widows is well known. Less well known is that there are now no longer women living older, much older than 59 years old, younger than me, no longer a Village of Widows, a village without grandparents.

The young women of the Dene Suline are refusing to having babies. They're refusing to have babies because they don't want any more deformed babies. The CNSC and NB Power and Canada are responsible for nuclear proliferation and all the suffering that it caused.

Are we all aware that the waste is being used for weaponry. Today, Hanford had a major accident,

plutonium, which, as you know, was a daughter product of the uranium that's being fed into these reactors.

Fukushima, I met with four survivors a couple of days ago. Right now, between Tokyo and Sapporo in the North, people are dropping dead suddenly on the streets. They're dropping and becoming sick suddenly, mostly 30 and 40 year olds. We have some reports of children.

The suffering is ongoing and, as you all know, Fukushima is nowhere near ended. The disaster is nowhere near ended.

Chernobyl was over 30 years ago. The ongoing spread of radiation has also become increasingly well known, 50 percent of wild boars are inedible, too much radiation, too much radiation.

Trees are still holding in the radioactivity. At Chernobyl, they're rebuilding the containment that I'm told costs they don't know what it will cost yet and, even so, it will only last 100 years.

As indigenous people, our barometer is seven generations, roughly 150 years, and so that is failing, the plans are failing.

We don't talk about the worst case scenario but Fukushima and Chernobyl have happened. There is an earthquake risk here. We have advised you of it.

Our friends have advised you of it. The risk is present. It's unable to be eliminated. The same with the fatal flaw of the nuclear reactors which, again, our friends with Canadian Nuclear Society said we don't do epidemiology.

These serious safety issues must be handled. The Passamaquoddy have said no. A question, does CNSC understand its legal right? Do they understand they may be violating indigenous peoples? We need nuclear technology to stop. I live off grid. I think we all can. We don't need nuclear. It's not clean, not cheap and not safe.

Thank you.

GRAND CHIEF TREMBLAY: (Indigenous language spoken).

I'm the Grand Chief of the Woolastokiuk Grand Council known as the Maliseet Grand Council. We are the original governance that represents our lands, our waters and the air and this is our flag. Our flag represents a chief with his wife paddling, chasing a muskrat.

The muskrat is our totem and the muskrat, at one time, provided us with food, medicine, and clothing. Today, the muskrat is in danger because of dams and because of global warming.

The irony of me speaking here in the

loyalist city which is a colonial city is that we called this city Měnagwěs; that's our traditional name for Saint John, and a lot of our names have been replaced by the colonizer names. And our stories go way, way back, in our creation story to the present time, how we still look at these rivers and these lands with -- through the traditional mindset that we have.

I recently came back from the United Nations in Nordic City where I sat at the -- in its permanent form where the country of Canada reclaimed and restated that they will uphold the commitment to the United Nations declaration on the rights of indigenous people.

And part of that is that the indigenous people require to obtain free prior and informed consent in everything. And I sit here today requesting that, in our traditional land, because we're the only ones -- the traditional government who speak on behalf of the water, the animals, the insects, the birds, the earth and the air.

We speak on behalf of them because nobody is listening to them. We want safety and we want to protect our land and I urge you to support Chief Hugh in stating that -- to shut down this nuclear waste station.
(indigenous language spoken)

THE PRESIDENT: Thank you.

CHIEF AKAGI: There is irony that Point

Lepreau is located very near a fairly archaeological discovery dating back 13,000 years. My DNA in this place is a product of 13,000 years of evolution, creating a connection which has never been broken, despite every attempt by those we only wished to help.

The ancestors interred in the soil are part of me and, yes, with my voice, I speak for the dead.

We all believe it is time to return what was taken, to restore what was destroyed. When we were discovered, your words, not mine, you referred to this place as paradise.

Despite your discovery, I assure you, it was never lost. I understand we are the first generation to leave a lesser world for the generation to follow. Not a good legacy.

A wonderful friend asked me recently, "What does good look like?" And, at the time, I did not have a good answer but, upon reflection, I'm starting to get the picture.

Trees, tall and upright; forest, diverse and free of monoculture and clear-cutting; water, clean and unpolluted; animals with undisturbed habitat; people, happy and healthy.

Nowhere in this picture do I see nuclear waste, dams in our rivers, smog in the air.

The last presentation I made to this forum, I did discover what bad looks like. I came to protest the lack of consultation with my people, indigenous peoples of this territory. I would later be informed that this was resolved by considering my appearance at this forum consultation.

Now that's pretty bad.

I do not come to beg, plead or threaten. I only wish to appeal to a part of you that I do not believe was ever allowed to enter this room. I need you to prove me wrong. I need to see some integrity throughout this process.

More irony? The entity which entered our territory less than 40 years ago was given one warning, three and a half hours to promote whereas those representing 13,000 years are given but ten minutes to protect.

THE PRESIDENT: Okay, thank you. Any questions? Ms Velshi.

MEMBER VELSHI: Thank you. I'll ask Point Lepreau, can you tell us the kind of consultation, ongoing engagement that's happening with the Passamaquoddy Nation?

MR. HICKMAN: Charles Hickman for the record. We've been engaged with Chief Akagi and some of his people, we know them, probably for six or seven years.

And I suggest it's engagement and it's information sharing.

It started back basically in the late 2000s as we were going through this time of refurbishment and Kathleen Duguay has been in contact with Chief Akagi many times. The Chief has been to the site. It is engagement, it's information sharing, it's not consultation.

So it's recognition of their presence, their interests and we are providing information and sharing information.

MEMBER VELSHI: And staff, can you cover what's happened at the CNSC's end?

MR. FRAPPIER: Gerry Frappier for the record.

I would ask Mr. Adam Levine to respond to that, please.

MR. LEVINE: Adam Levine for the record, Aboriginal consultation advisor for the CNSC.

So we have reached out to Chief Akagi and the Passamaquoddy Nation on multiple occasions in advance of the licence renewal and NB Power also has been keeping us apprised of their engagement with the Passamaquoddy Nation. And we take their concerns very seriously and that's why we want to continue to provide opportunities through our funding program, engagement directly with CNSC

CMD 17-H2.58

**Oral Presentation by
International Brotherhood of
Electrical Workers, Local 37**

MR. GALBRAITH: (Off microphone) Okay.

Good evening, President Binder and Members of the Commission.

For the record, my name is Ross Galbraith, I'm the Business Manager of Local 37 of the International Brotherhood of Electrical Workers, the IBEW. I'm the Chief Officer of the local union.

I'm also joined today by Mike Goddard, an employee in the Electrical Department of Point Lepreau where he is also the co-Chair of the on-site Joint Health and Safety Committee as well as the Vice-Chair of the Point Lepreau IBEW unit.

We're here before you today because IBEW 37 fully supports NB Power's application for a five-year renewal of its nuclear power reactor operating licence for the Point Lepreau Generating Station.

I'm going to begin by providing some background on the IBEW, some context on why we're in a position to comment on the operation of the Point Lepreau Station.

work intern employment opportunities for students at both institutions.

Third, Point Lepreau is a key source of employment in New Brunswick, employing over 800 employees directly and approximately another 900 indirect and induced jobs within the region. These employees contribute significantly throughout southern New Brunswick, both through economic activity and by participating as members of their communities.

And, finally, Point Lepreau employees generously support local community organizations through volunteer efforts and contributions. Just a few examples include over \$100,000 raised for local food banks since 2002, their recognition multiple times as the top fund raiser at the local community hospital foundation dragon boat races and our recognition with multiple awards of distinction by the local United Way fund-raising campaign and the award-winning participation by Lepreau employees in the Elementary Literacy Friends Program at a school located near the station. This program helps grade 2 students who will benefit from one-on-one help to improve their reading skills.

In conclusion, IBEW Local 37 believes that NB Power is established and continues to promote a positive health and safety culture and we're pleased to be part of

that culture's growth and success. Our members are always able to provide input for enhanced safety measures that ensure continued improvements for the safe operation of Lepreau.

It's our opinion that the station is being operated in a safe manner that's in full compliance with NB Power's operating licence and with great care for the environment and surrounding communities.

NB Power consistently places the safety of the public and their employees first and they've invested in a high level of training for their employees to ensure that the Point Lepreau Nuclear Station operates safely and reliably and they believe in open, honest communication which has created an atmosphere where employees can freely identify issues and concerns.

The public can trust that the IBEW members working at Point Lepreau have the highest level of training, experience and expertise to ensure that safe and reliable operation will continue.

And I'll conclude by re-stating that Local 37 is in full support of NB Power's application for a five-year renewal of its nuclear reactor operating licence.

This concludes my remarks and we'd welcome the opportunity to address any concerns that you may have.

THE PRESIDENT: Thank you.

Questions? Dr. McEwan?

MEMBER MCEWAN: So, thank you for the presentation.

So, the Joint Health and Safety Committee is obviously one of the key committees within Point Lepreau, and you're Joint Chair?

MR. GODDARD: Mike Goddard, for the record. Yes, I'm the co-Chair.

MEMBER MCEWAN: So, what's your role in that? How would you influence agenda setting, how would you influence asking important questions or making important recommendations that need bilateral conversation?

MR. GODDARD: Whenever any issues are brought forward to the Joint Health and Safety, if they were brought to me, I would take them to the Committee, we'd discuss them as a group and we would take them to management as required.

MEMBER MCEWAN: And your taking them to management, would that be in the form of a recommendation or of a suggestion or of a demand?

MR. GODDARD: It would be in the form of a recommendation.

MEMBER MCEWAN: And if you didn't get what you felt was an appropriate answer, how would you address that?

MR. GODDARD: I think we would bring it back to the Committee, we would discuss it again and maybe put more oomph behind it or try to convince the management that the avenue that we're looking for or the avenue that is required, that we would try to submit a better plan so that they would understand fully the implications of the issue.

MR. GALBRAITH: May I add to this? We have a number of other committees that work to really complement the work of the Joint Health and Safety Committees throughout New Brunswick Power.

We have a monthly meeting of all the operating companies' members from IBEW that meet in our office. They've been meeting every month for the last 22 years, they've never missed, and they will address issues -- they're more focused on ways to improve the safety culture, other things that we can do.

In addition to that, we have a bi-monthly meeting where myself and my staff meet with the Vice Presidents and the CEO and we would bring up any issues there that we felt were unresolved at the local level.

But, you know, speaking of Point Lepreau, very rarely does that happen because I think the track record and the culture there is when they have a problem they resolve it.

THE PRESIDENT: But, therefore, is the question, how busy are you? If the safety culture is so pervasive, you probably don't have much reason to meet and discuss.

MR. GODDARD: One, it's a provincial mandate, it's a law, we must meet. We have meetings once a month for the whole year, so it's mandated by law through Work Safe New Brunswick. So, even if we don't have a lot of major issues or safety concerns to talk about, there's still ways to improve safety, communicate it to the work force and be there to champion their issues.

THE PRESIDENT: That's what I'm trying to get a handle on, whether issues are being raised, employees are not afraid to raise issues.

Point Lepreau?

MR. PLUMMER: So, Brett Plummer, for the record.

First a clarification. The Joint Health and Safety Committee is a collaboration between management and the workers, so it's not the workers coming with a recommendation necessarily to management, it's they collaborate on an initiative.

So, for example, you just got described essentially our shared commitment. One of the newer shared commitments is plant safety into our work and figure out

what does that really mean, how do we get a mindsight where, from a prevention standpoint, we go out and walk a job down ahead of time?

We'll give that task to the Joint Health and Safety Committee to figure out between collaboration between management and the workers what that means and what we need to do to is improve from a continuous improvement standpoint.

People bring up issues all the time. We have a very low threshold reporting at Point Lepreau. People have safety issues or concerns, they're encouraged to bring them up, there's multiple defence in-depth barriers or ways or pathways they can bring up issues if they're not satisfied with some of the responses.

But my experience at Point Lepreau is, folks are very willing to bring up issues, we're very willing to listen and resolve issues and it's incented in the corrective action system and disposition appropriately.

THE PRESIDENT: Thank you.

Ms Velshi?

MEMBER VELSHI: I have a question for you. You mentioned that you have this annual national conference where you share best practices. So, can you share with us maybe the top three best practices from Point Lepreau that you would have shared with your colleagues from elsewhere?

MR. GALBRAITH: Ross Galbraith, for the record.

That's a great question. I think that -- I'm very proud of the relationship that we do have and I think that that's a key to being safe and when you talk about the ability to communicate and address issues quickly, right.

Many times in my dealings with other labour unions or even other locals of the IBEW, I find that sometimes the relationship isn't as good and they're somewhat more adversarial. So, I'm always proud to be able to talk about that we have very good lines of communication, that we approach, you know, issues as problems to be solved. They're not confrontations to be won; they're problems to be solved. That's one thing that we talk about.

We have certainly talked about the safety commitment document and the way that we develop that. We actually brought that forth from a meeting with some other IBEW locals in Canada. BC Hydro had done some work on safety culture, we thought it was a great idea, approached NB Power and we sat down over a period of time and came up with this commitment, which we then rolled out to all our employees. We have it in all the workplaces. We have just recently revised it, as Mr. Plummer talked about, to build

in -- when we reviewed it, we found that there was an area where we had to -- we wanted to emphasize that, you know, safety wasn't something you did just before the job started, you actually want to include it into the planning of any job that you did. So when I am meeting with other locals, I will talk about this process that we put in place, the safety commitment document.

And also I guess just talking about some of the process we have in place at the plant, people are always interested, particularly in the United States. You know, CANDU is a bit of a different beast for them and so we will be talking about some of the things we are doing here. There is a lot of interest in things that the Commission is interested in, you know, hours of work, drug and alcohol testing, fitness for duty, so they are keen on what we are doing in Canada and I think that in many ways we do lead the pack.

THE PRESIDENT: Monsieur Tolgyesi...?

MEMBRE TOLGYESI : Merci, Monsieur le Président.

I have a few questions about code of excellence. It is training which is done by a union to unionize the employees. Is there any evaluation or recognition of completion of the training? What is the duration?

MR. GALBRAITH: So this is a process that initially was implemented in some of the Construction Branches of the IBEW 10 years ago and it was just a recognition that, you know, really we compete with our skills. And we have been rolling it out to the various branches within the IBEW and in the last couple of years we are starting to roll it out in utility. I have rolled it out in our local union starting last year.

And a pretty unique process. I wanted to make sure that it really reflected the values of IBEW members in New Brunswick. It was important to me. I mentioned earlier the definition of SPARQ and how they define excellence in safety, excellence in professionalism and so on. I didn't want it to be the definition from Toronto or from Washington, I didn't want it to be my definition, I wanted it to be their definition.

So we started with having a number of facilitated sessions around the province. We had close to 100 people participate. We got a facilitator to come in and we asked them, you know, how do you define these things, what is it you are proud of, what are the things that you would change? So we went through that to kind of really develop what it meant for us.

Then we put together a multimedia presentation. We met with another group of people that was

interested in doing this, showed them the presentation. We revised it a few times, we showed it to our executive board and we finally came up with a product that we are pretty happy with and we asked for volunteers to deliver it. So instead of me delivering it or one of my staff members, I wanted it to be done peer-to-peer. S

So we actually had 28 members that volunteered. We hired a person that's an expert in presentations to come in and coach them how to effectively deliver this training and we started rolling it out to the employees at NB Power last December. We did about 800 people before Christmas and then we did about 500 or 600 in the month of January and now we are kind of catching up with places where people might not have been present.

Now, to support this, on April 1 we had a conference in Fredericton. We have an annual spring conference and the theme of the conference was excellence. We had two keynote speakers that spoke about excellence, excellence in the workplace. We had 15 breakout sessions so the employees could pick -- or our members could pick the sessions that they wanted to go to and everything was themed on excellence.

We also announced at that conference that we are going to be hosting an annual award for excellence and the initial group that we recognized were actually the

people who volunteered to deliver the Code of Excellence training to their peers. So we are going to have an annual award.

Following the conference we had some material developed, you know, some banner stands and things like that. The Point Lepreau outreach was starting. I talked to the communications department down there. We moved this material down there. And they had a process where people could submit ideas for process improvements where they identified a safety issue, these blue cards, and so what we did was we randomly drew people who submitted these good ideas and we awarded them with a T-shirt that -- a nice-looking T-shirt that said Code of Excellence on it.

So that is what we have done just recently, but we are in the process of planning training for shop stewards to help them understand better how they can encourage members the odd time where somebody may not be living up to our standards. So they can approach that person and say, hey, what's going on, and just try to help them, encourage them to live that standard that we all expect.

MEMBER TOLGYESI: What is the duration? Is it a day, it's two, four days?

MR. GALBRAITH: So it was a one-hour introduction section, about an hour and a half, a

multimedia presentation, a question-and-answer session. And for most people, the idea around excellence and safety, professionalism, accountability, relationships and quality, people will say it just makes sense. One of the things we wanted to do is we wanted to kind of normalize it, that this was what we wanted. So, you know, sometimes people will have stereotypes of unions that maybe unions protect people that don't have high standards. That is not what we are about, we want the highest standards and, you know, the vast majority of our members perform at a very high standard, so part of this exercise was just saying this is the normal standard that we want. So it's not anything that's rocket science, it's just common sense. And the next phase of helping stewards continue to reinforce what our standards are, we are going to continue on and it has been very effective so far.

In fact, I can say this, in plants in the United States where they have introduced the Code of Excellence they have seen some remarkable results in the number of grievances dropping, safety levels being very high. Florida Power and Light introduced a Code of Excellence, our locals down there, and they have --the last couple of years they have had their best safety records ever.

I was at a conference last week. I talked

to a business manager from Ohio representing workers of the Davis-Besse plant and they have done the Code of Excellence training with their own workers and they are planning on doing it with supplemental staff coming in prior to their next refuelling outage. So they have seen this training has been very effective. So we are going to continue to see what our members are doing in other locations and adopting best practices.

MEMBER TOLGYESI: You were talking about all workers' annual performance appraisal.

MR. GALBRAITH: M'hmm.

MEMBER TOLGYESI: Who is doing that?

MR. GALBRAITH: So about a year and a half ago NB Power and IBEW sat down to talk about how we could introduce measures of performance into the annual performance appraisals and into the job bid process, the process where people would compete for jobs. And what we decided as the measures of performance, you know, the normal performance process would go through all the normal things that you would be used to, but the part that we wanted to include in the job competition process consisted of a measure, a score that the supervisor, the person conducting the review could assign to the employee.

They would do it during the review and it would judge them on three areas. The first was how well

the employee adhered to the safety commitment document, so the six areas that we talked about earlier: having courage to speak up, refusing unsafe work, planning safety into your work, all those things, right. So they can get a maximum score of 10. So 10 would be exceeds expectations, 7 1/2 would be meets expectations, 5 would be needs improvement, and 2 1/2 for does not meet expectations. They also do performance based on interpersonal skills, which is really your ability to work with others. It's not how well you can maybe give a speech, but it's just can you get along with others, right. And the third area is your job competence for the level that you're at. So there is a score assigned to each of those things.

Now, if somebody gets a does not meet expectations in any of those factors, they are ineligible for job bids until they improve that score. So in fact if somebody has a score that does not meet the standards, the expectation that we expect, the supervisor has to, one, you know, inform the employee, they have to agree on a performance improvement plan and then they will be rejudged, you know, in a three-month or six-month period to see if they have improved the areas that might be brought to their attention.

MEMBER TOLGYESI: Is it the supervisor who is doing that or you are doing that jointly?

MR. GALBRAITH: It would be the supervisor doing it, but the score has to be validated by the next level up of leadership. So their superintendent would validate the scores.

THE PRESIDENT: Ms Velshi...?

MEMBER VELSHI: A quick question. A lot of initiatives that you have spoken about have been for New Brunswick Power. Is there anything that makes Point Lepreau unique given that it's a nuclear facility? You know, my experience has been because of that additional risk there is just a higher level of vigilance, but have you encountered that?

MR. GALBRAITH: You know, the standards in the nuclear industry are very high and I think the approach taken at NB Power and IBEW 37 is we want high standards across our union and the company and so it's no secret, I think that that's part of the reason NB Power was named as having the best safety culture in Canada last year. And that award, by the way, is validated because the organization that hands it out requires that the employer conduct a secret, like a survey, an anonymous survey of employees, they need a minimum number of people that respond to it and answer questions about the safety culture. So it's not just, you know, the group that can write the best application. It has to be backed up by

employees answering the survey and demonstrating that they have actually adopted a safety culture.

So I think that, you know, other parts of NB Power are very safe because of the work that occurs at Point Lepreau as a result of it being a nuclear facility that requires very high standards and we are continuing learning from them, just as they can learn from some other areas too. You know, if you look at the line trade and some of the special requirements in that very dangerous occupation, there are certainly things that we can bring to Lepreau that we are utilizing in other areas of the business.

THE PRESIDENT: I would like to follow up on this. So they won Canada best health and safety. This is across all sectors?

MR. GALBRAITH: Correct.

THE PRESIDENT: So what percentage of employees are Point Lepreau in all of NB Power?

MR. GALBRAITH: It would be about 33 percent.

THE PRESIDENT: So I think, following up on Ms Velshi, is the 33 percent giving them the -- is it because of the 33 percent they got such high marks or the rest of the NB Power is also as good as Point Lepreau?

MR. GALBRAITH: So I can -- if you don't

mind -- Russ Galbraith for the record.

Belledune Power Plant, a thermal plant in Northern New Brunswick, just went over 2 million hours without a lost time accident. You know, 110 employees, so 2 million hours there is a long time working, right. Coleson Cove Thermal Plant just outside here just went past 2 million hours -- actually, they went past 2 million hours last summer. We have a location, a very small hydro facility in the southwest corner of the province, I think they have had 12 years without a lost time accident.

So, you know, NB Power and IBEW members working at NB Power have a very, very high level of safety. In the last two years we have had three catastrophic storms. One in the summer put the power out for about a week, you know, caused thousands and thousands of outages. We have had two severe ice storms. You know, the level of devastation is incredible. And we restored power in all three of those outages without a single scratch. So I think that speaks to how we work as an organization.

THE PRESIDENT: Thank you. Anybody else? Okay. Thank you very much. Any final thought?

MR. GALBRAITH: No. I just appreciate the opportunity to address the Commission and thank you for your time.

THE PRESIDENT: Thank you.

CMD 17-H2.28/17-H2.28A

**Oral presentation by the
Canadian Nuclear Workers' Council**

THE PRESIDENT: We will now move to the next submission, which is an oral presentation by the Canadian Nuclear Workers' Council, as outlined in CMDs 17-H2.28 and 17-H2.28A.

Mr. Shier, the floor is yours.

MR. SHIER: Good evening, Members of the Commission, fellow intervenors, other staff, members of the public, anybody else I forgot.

My name is Dave Shier. As indicated, I am the National Director of the Nuclear Workers' Council. Assisting me is Mr. Don Dixon, who is the Plant Chair for the IBEW at Point Lepreau and also a past member of our Nuclear Workers' Council Executive.

So I only have one slide. As people indicated, I have a real short presentation. I was kind of planning, I was expecting some new Commissioners, so I was going to do a little education, but we've got the old guys and maybe this will be a refresher for you.

--- Laughter / Rires

MR. SHIER: So we are the collective voice

of the unions in the nuclear industry across Canada, and naturally the IBEW at Point Lepreau is one of our longstanding members and participates with us fully.

So overall, the industry is very highly unionized and we credit that to the -- it's a contributor to the safety culture in the industry right through. The union workplaces are known as safer workplaces than non-union workplaces.

So our presentation. Right up front, we naturally support the licence for relicensing of Point Lepreau, and that is the collective voice. Lots of the unions on there may not work at Point Lepreau but they contribute to Point Lepreau, for example, the miners that supply the uranium and the fuel processors. And if you look on that chart you will see a lot of the mainstream unions across Canada: steelworkers, UNIFOR, power workers, even firefighters, machinists, so on and so forth. So they have their full support.

Now, the support comes from just not that they wave their hand and say, hey, okay, we are on board with you. Delegates from those unions have toured Point Lepreau on a couple of occasions over the years and also our organization gets together once a year where we compare notes on some of our best practice ideas, we update people on the industry, but we also learn from one another. So

these tours are very instrumental because it's people coming from Bruce Power, from OPG, from the mines that come through and they hear about the safety programs and they see the plant, so on and so forth. So their support of the relicensing comes from their own practical experiences as well.

Now, lots of times, as the last intervenor indicated, people think unions are just interested in jobs. Naturally that is a primary role, but unions are very -- like the CNSC, one of their roles is worker safety and worker safety of all the unions are very high on their agenda, followed by the environmental issues. The trade union movement looks at environmental issues basically starting in the workplace. If the workplace is safe, then the environment is safe and also the public is safe. So we say that the public can be reassured, especially in Point Lepreau and other facilities across the country, that they are safe, there are strong unions there. If there are any issues that would affect public safety or worker safety, they would definitely be raised by the unions and appropriate actions would be taking place.

So I'm going to end there and pass it along to my colleague and he will give you some of his views of why we are in full support.

Don...?

MR. DIXON: Good evening, Commissioners.
Don Dixon for the record.

Through my involvement with the Canadian Nuclear Workers' Council, our consortium has been focused on, you know, collaborative efforts towards safety and, as Dave had said, we have gone from the mining sector to fuel fabrication to all the plants across Canada and we share best practices. And through our annual convention we get to get together and collaborate on those and find out what best practices are taking place across the industry. We also do that to help each other. So it's I think a very unique thing that we have in our industry, this collaboration among union members, and we are fully supported by our employers as well.

Do you have any questions?

THE PRESIDENT: Thank you.

MR. SHIER: Thank you, Don.

Dave Shier for the record.

So in conclusion, I promised I would be short and I am noticing the numbers here, so I am probably the shortest one today, I get the prize for that. We are in full support of the Point Lepreau licence and you can be assured the workers there are all dedicated, they are long-term, most of them are long-term workers, we hear about the replacements coming up and we are confident that

the skills transfer and especially the safety transfer will continue along. So we are in full support and we are happy to answer any questions or concerns you may have. Thank you.

THE PRESIDENT: Thank you.

Questions...? Dr. McEwan?

MEMBER MCEWAN: Thank you.

You mentioned that you act sort of almost to ensure that best practices move across the industry. Do you also have the opposite role or do you see yourselves as having the opposite role, that if you see areas of problem developing in one area or one other area, you have a mechanism to sort of raise a red flag and say be aware of across the industry that this might be a problem or that might be a problem?

MR. SHIER: Dave Shier for the record.

We don't have a formal process, but it is normally what we run into if a local union at a place is having a difficulty. They now know who to call. For example, if it's an issue they want some information on how things are done at Point Lepreau, they would call Don or Ross or myself and we would put them in contact with the people in the Council that can answer their questions. If we saw something when we are on a tour that was unsafe, naturally we would point it out.

But I will say that, you know, the programs that will work in one place don't necessarily work in another place and sometimes you can take those programs and modify them. So there are different ways to approach and that's the idea of our kind of networking group. For example, the new program at Point Lepreau will be explained to the other members at our conference coming up this year and some of the groups will pick pieces of that and maybe implement them in their areas. So it does happen. As I said, safety is a major issue for unions right across our industry, so anything that we can do to improve that and we have a lot of improvements over the years will work.

We also attend -- or I also attend the IBEW Nuclear Conference in the States and we also have contacts with our international group worldwide with other safety programs as well.

MEMBER VELSHI: I have a two-sided question. One is to pick up on what you just said. So is there a similar forum as this internationally just for nuclear unionized workers?

MR. SHIER: Yes, there is, and actually I chair that one as well. So it's modelled under the Canadian model. It's called the International Union Workers' Network and we are based out of Geneva. It's one of the, what you call, the global unions. Unfortunately,

we don't get to meet that much and anybody that does anything internationally understands that things move awful slow. But through that we can have, you know, some discussions and share some views on different ways. That group we have toured Fukushima, we were back in Chernobyl last year for the 25th anniversary and we do share some safety issues, and it tends to be -- not being biased, but being honest -- Canada I think has higher standards, so we share a lot of our experiences with them. At that level we do have one of our members as part of the main committee of the ICRP, International Commission of Radiation Protection, so we get some input on there and that happens to be one of our members, the Power Workers' Union, on that.

So we are connected internationally. One of the few groups, the Nuclear Workers, have their own network and that is mainly driven by the fact that no matter where we go and no matter what happens in the industry at one place or another it affects all of us and the controversy or the anti-nuclear movement kind of ties us together to work together and the best practice thing is a spinoff when you get labour people together.

THE PRESIDENT: I'm still puzzled by Geneva. Why Geneva? Why not Vienna where the IAEA is?

MR. SHIER: Dave Shier for the record. Well, it used to be in Brussels, that's

where the main thing was, and then they all moved to Geneva because they get -- all the big unions are tied into the ILO, so the Geneva part is there. We drop by Vienna a few times and have some chats there as well.

--- Laughter / Rires

MEMBER VELSHI: So the second part of my question was are there any Canadian nuclear unionized work force that you don't represent?

MR. SHIER: We have pretty well all the unions that are in the main operating part. We are now spanning into the supply chain. The workers at the CNSC are unionized. We have a good relationship with them but, to date, they haven't come in our house. They have enlisted their boss to say they are neutral.

--- Laughter / Rires

MR. SHIER: Maybe they'll come in. Other parts of their union are in, the main union, but that individual local is -- right now that's their philosophy.

MEMBER TOLGYESI: Do you and how do you collaborate with the industry with NB Power and across Canada with other ones in letting know the nuclear industry the position of how they are safe or how they are working, what is the safety culture, et cetera?

Are you participating in these kinds of activities as a union, you and also International

Brotherhood of Electrical Workers?

MR. SHIER: Dave Shire for the record.

Yes, as far as the other broader labour movement is there is -- the umbrella in Canada for all the unions is the Canadian Labour Congress based in Ottawa. They have a health safety environment committee and several of our member unions participate on that national committee. The IBEW is on there, the Power Workers, the professional engineers.

So a lot of the other unions have representatives that aren't from nuclear. So they are kept -- the congress and that committee is kept up to date on the safety measures in the nuclear industry on a regular basis by the representatives there. Personally, I was on that committee for years, years ago, and I think we brought a lot of again best practices that the other unions could pick up on.

MEMBER TOLGYESI: I mean, not other unions. I mean in public in general because the perception of public, you know, is that the nuclear industry is so-so safe or practices are not as good. So what you do to improve or promote the image of the industry?

MR. SHIER: Dave Shire for the record.

That's one of our mandates is to speak out on behalf of the workers in the industry and kind of the

responsibility of unions is to talk about the industry as being safe -- a safe way for electricity production. So we talked to a lot of other unions.

For example, this week there is a national conference in Toronto, the Canadian Labour Congress. We have a display booth there where we have dialogue with the labour leaders across the country and we get a lot of questions from people about the industry.

I will say that it's a lot better now than it used to be. People used to walk by us and you know have the old jokes about glowing in the dark and everything. We are getting a lot of interested questions.

Yesterday, I had a question which was kind of timely and affected you guys because some guy come along and said, "Oh, you represent the union workers. You represent those people at the CNSC?" And we said, "Well, no, they're good friends but we don't represent them".

And they said, "Oh, they come into our facility with university and they are going to give us a hard time. They really check our standards and everything else".

So one of my colleagues, "Well, that's good. That's what they are supposed to be doing and that's how you have a safe workplace". And the guy says, "Yeah, I know that but that's cost me a lot of work".

But even discussions -- so you're getting through. Your guys are doing a good job. That's a promotion for the brothers and sisters in the PIPs local at the CNSC. So we do get a lot of questions.

At our booth this year we are kind of -- we give a lot of information but we're prompting the OPG DGR. There's a lot of issues around that and also a life extension of Pickering is some of the features that we're trying to build some support and let people understand what is going on. So we do a lot of that kind of public relations aspect to the labour movement and other groups.

MEMBER TOLGYESI: My last one is to NB Power and Point Lepreau. When you do these meetings with communities do you have your employees from union side, the unionized employees who are participating in these meetings?

MR. PLUMMER: Brett Plummer for NB Power. Absolutely. The majority of the folks at these open houses are union members.

THE PRESIDENT: Okay, thank you. Any final thought?

MR. SHIER: No. Thank you for having -- listening to us and, as we say, make sure you give that five year licence.

--- Laughter / Rires

CMD 17-H2.31/17-H2.31A

Oral presentation by Ron Mawhinney

THE PRESIDENT: Thank you.

The next submission is an oral presentation by Mr. Mawhinney, as outlined in CMD 17-H2.31 and 17-H2.31A.

Mr. Mawhinney, the floor is yours.

MR. MAWHINNEY: Welcome, Members of the Commission, and general public.

For the record, my name is Ron Mawhinney. I am a lifetime resident of coastal southwestern New Brunswick, born on the Point Lepreau Peninsula and a lifetime close neighbour to the generating station.

I am pleased that the hearing is taking place in Saint John. Today I will be speaking on the following topics:

- The environment, the station and the fishing industry;
- Two, the safety and security;
- Three, community liaison committee.

Approximately 75 percent of the area bordering the station is the Bay of Fundy, the commercial fishing industries' workplace, so we are always concerned

environmentally about what is happening here, the water quality in the bay, the condition of our shoreline beaches and what happens on the land next to the bay.

For years through strict conservation and regulated protection laws of a multi-species fishery, the Bay of Fundy has been very sustainable.

Since the first regulated fishery in the area around 1880 until present, the quality of the bay still exists. For approximately the last 42 years since start of construction, the nuclear station has been an important partner and a very responsible steward in maintaining this quality of the bay for the future.

The primary fishery in this area, Atlantic hard-shelled lobsters, are shipped to just about every corner of the world. Through strict catch traceability programs at the federal level, foreign buyers and consumers are constantly checking us on our harvesting practices, the health of our product and the quality of the environment we fish in. Just this past fall, 2016, the quality and health of lobster catch was at its best in recent years and the reproductive signs for the future stock were very good.

In recent years, a large part of the Bay of Fundy just west of Point Lepreau has been undergoing a lot of work on a developing new fishery, ocean quahogs or mahogany hard-shelled clams. This project is jointly

partnered between Fisheries and Oceans Canada and the local fishing Industry. At present, things are looking good to get this project to the final stage of a regulated fishery.

This clam is a siphon feeder just below the ocean floor, and weekly lab testing on its condition and health has been great. As a representative of the fishers involved, I have had the opportunity to show some sample clams to one of the largest clam processors in the eastern seaboard in Maryland, U.S.A. Their lab expert told me it was one of the healthiest and cleanest clams he has worked with. He further explained that to see these results the area where it was harvested was in great shape. This fishery is well-established in the neighbouring State of Maine, Beals Island area, but it is totally new in the Bay of Fundy.

All of what I have just stated, recognizes that the bay on all sides of Point Lepreau is being well looked after, thanks to the committed high environmental standards of the nuclear station and the fishing industry.

On the security side, since 9/11 the area surrounding the station is much more aware of an increased security presence in the area. The Bay of Fundy is a busy waterway, large super tankers and cargo ships daily. The fishing fleet is always aware of any movement in the bay and the solid relationship between the nuclear station

security department and the fishing fleet is a huge benefit to the whole area. The fishing fleet equipped with the latest in marine electronic technology can act as the extra eyes and ears on the water.

The cooperation between the security staff at the station and the fishing fleet is being steadily improved on by meet and greet sessions at the local wharves between vessels captains, their crew and security staff. The fishers are proud to be contributing to the station and their community.

The sharing of information between the community and the station is first rate. They get totally involved in community events and involve us in a lot of exercises at the station. Projects at the station that may involve heavy movement by road or by water, they will always ask for our input. If it relates to the bay, we are only too glad to offer our knowledge with the reassuring comfort that they do listen. This happens less than often in the corporate world today. It is reassuring to me, and by most all in the surrounding communities, that the "teamwork approach and operating mission" at the Point Lepreau Nuclear Station is to provide cost effective, safe and reliable green energy to New Brunswickers for years to come.

In closing, I would like to express my

full support for NB Power on the application for the next five year operating license at the Point Lepreau Nuclear Station.

Thank you to you, Mr. Chair, and Commission, for coming to Saint John for this hearing and the exceptional role that you play in keeping Canada's nuclear industry safe and allowing me the opportunity to present.

THE PRESIDENT: Thank you.

Questions? Mr. Tolgyesi.

MEMBER TOLGYESI: Tell me, are you a Point Lepreau employee?

MR. MAWHINNEY: No.

MEMBER TOLGYESI: No? Okay.

--- Laughter / Rires

MEMBER TOLGYESI: Now I would like to ask you. Some intervenors expressed concerns regarding Point Lepreau's limited communications towards the public.

According to your presentation and your perception, these communications are very good.

Do you have any suggestions where they could be further improved to make sure that the perception would be more positive?

MR. MAWHINNEY: I first sat on the Point Lepreau Public Liaison Committee for 15 years, since its

initial start. I took leave for a while because I was a commercial lobster dealer exporting lobsters overseas to Europe. And recently in the last year I went back on the committee.

I fully support everything. They've been up-front. They listen.

You know, I liken Pointe Lepreau to the Jolly Green Giant in the community. You would never know they're there unless you actually drove down to see the plant.

The co-operation has been great.

And as far as area surrounding the plant that they service on this Public Liaison Committee, it doesn't go but a 20-mile radius. We have members on the RCMP that are 45 kilometres on one side. I myself live in Saint John, which is 45 miles the other way.

So it's actually a 90-mile radius.

MEMBER TOLGYESI: But I don't think that the whole population from Saint John and Point Lepreau could become a member of a committee to have a good understanding of what's happening.

So my question is what the committee should do to make sure that there is a better understanding of the activities and performances of NB Power at Pointe Lepreau?

MR. MAWHINNEY: That's a good question.

I think from beginning till now the committee has been doing a good job in interacting with all the communities. We do a lot of partnering with the station in local community events.

I know most committee members, we have a broad range of all committee members from different work places, and they interact with community members and they get the message out as to what is happening down there at the Point.

MEMBER TOLGYESI: Including indigenous communities?

I don't know if you were listening to some of the interventions concerning about lack of communication.

And also we would be interested in your view about the relationship with the Indigenous fisher. What are your thoughts about that?

MR. MAWHINNEY: Yes. I've been personally involved during different exercises at the Point with the First Nations. Getting the word out, I have actually helped at the Point, of contacting all the licence-holders in District 36, which encompasses all southwestern New Brunswick. We actually would deliver letters out to all the registered licence-holders of any exercises or what was

happening in the commercial fishery.

We would deliver them to the St. George office west of Lepreau and they would be forwarded out.

Now all the First Nations in New Brunswick that have licences would be on that list. So they received notice, as well as every other fisher in southwestern New Brunswick.

MEMBER TOLGYESI: Thank you.

MEMBER MCEWAN: Thank you for the presentation.

I was interested in the ocean quahog. You say that it is an established fishery in Maryland -- in Maine, sorry -- but it's new to the Bay of Fundy.

Is that because it's migrated up or because nobody has thought to use it as a source up till now?

MR. MAWHINNEY: For years the product was there, just they started it earlier in the State of Maine. We started to notice it about five or six years ago as a bi-catch of scallop fishing. It would turn up in the scallop drags off the bottom.

We started getting interested in it and doing some research, started to work with the Department of Fisheries and Oceans. And it started out in a Stage One fishery and now it's developed until it's getting close to

the third stage that it's got to go through to become a fulltime commercial fishery.

MEMBER MCEWAN: How long does that period take and how many bumps along the way?

MR. MAWHINNEY: It takes quite -- there's a lot of lab work that has to be done. There's a lot of testing that has to be done on the product when we go get sample product for domoic acid, PSP bacteria. It has to go to the Department of Fisheries and Oceans lab just as soon as the boat hits the wharf.

I mean, we've got to go through that sometimes for five and six weeks before we get the clearance to go ahead and catch the product.

MEMBER MCEWAN: Thank you.

THE PRESIDENT: In the same vein, what's the lobster situation?

Are you concerned about -- I'm not an expert in this field. I thought lobster need cold, cold water and the nuclear station makes hot water.

Is that an impact on the lobster fishery?

MR. MAWHINNEY: Back when the station was, just before it was going to open, there was a page in the local newspaper that came out that had a picture of a giant lobster. And because of the warming of the waters in Point Lepreau. My dad was excited.

He was a lobster fisherman.

--- Laughter / Rires

MR. MAWHINNEY: I turned out to be a lobster fisherman and then I turned out to be an exporter overseas, and so on, with a lobster company.

No. Actually, as we sit here in this meeting tonight, the water you would think in January and February in the Bay was the coldest. It is not. It is the coldest the first of this month because fresh water cools down salt water. And right now it's at about 34, 35 degrees Fahrenheit when lobsters don't start to crawl until about 43 or 44 degrees Fahrenheit.

So the stock is very good. There is a lot of signs the stock has probably been the best it has been in the last 20 years, this last fall just past.

And there is a lot of signs, reproductive signs, for the future too, for juvenile lobsters and so on. It's the best we've seen for a long time.

THE PRESIDENT: Thank you.

Ms Velshi?

Anybody else?

Well, thank you very much.

I have one question.

So you are now sitting on the Liaison Committee. So are you posting your discussion and making

the public --

MR. MAWHINNEY: Pardon?

THE PRESIDENT: The Liaison Committee --

MR. MAWHINNEY: Yes.

THE PRESIDENT: Do they have minutes of what was discussed, what was the agenda of your meetings?

MR. MAWHINNEY: Yes, they do have minutes.

THE PRESIDENT: So do you share them with the public?

MR. MAWHINNEY: If I have them, if I take them away from the meeting, I share them with all the people that I interact with throughout the communities.

As far as publicly sharing them, online or something, that's a question I can't answer.

THE PRESIDENT: Okay, thank you.

I would like to move on to the next submission, which is an oral presentation by Mr. Dykeman, as outlined in CMD 17-H2.55.

Mr. Dykeman, over to you.

CMD 17-H2.55

Oral presentation by Mr. Dykeman

MR. DYKEMAN: For the record, my name is Andrew Dykeman. I've worked at Point Lepreau for 26 years.

I'm an IBEW 37 member.

For the last ten years I've been a licensed controller and operator.

I grew up in New Brunswick and have lived close to Saint John my whole life.

So welcome to New Brunswick.

Now that you're here, what do you see?

I'll tell you what I see and maybe you'll see some of the same.

I see a lot of trees and a lot of pristine shoreline. I see uncrowded four-lane highways. I see heavy industries making products for export and keeping good jobs in New Brunswick. I see a polite, pleasant population, hopeful for the future and proud of their homes.

I see my family living in a safe, clean community. I see my daughter, Brittany, working as a shift operator at Point Lepreau. I see my granddaughter and extended family living in the area.

So keep that in mind for a second.

Let's go back in time about 40 years. New Brunswick was booming. We needed more electrical capacity. The leaders of the day saw the promise of nuclear power. They approached the regulator, the Atomic Energy Control Board at the time, and requested permission to build a

nuclear power plant at Point Lepreau.

The regulator granted permission to construct and operate a nuclear power plant with a commitment from NB Power to follow the *Nuclear Act* and *Regulations*.

The utility committed to meeting the regulator's expectation.

The station's process and procedural controls and the safety analysis behind them were built on that commitment, a commitment to protect the workers, the public and the environment. I see that commitment in action everyday.

I saw it everyday that I worked during this past month as the station successfully completed a maintenance outage. Workers and contractors coming to work to achieve the same goal, to successfully and safely complete pre-planned maintenance tasks. All the work that is done on our site must be done with a high quality and high standards.

The collaboration, teamwork and partnership that I observed between station staff, contractors and technical teams was second to none. For example, at the pre-job briefing people ensured that they fully understood their task at hand. They displayed a questioning attitude. If there was something that wasn't

understood, time was taken to explain it. They were fully prepared and ready to safely execute the work.

So during the past outage I saw it everyday that I worked as the station successfully completed this maintenance outage. The people at the plant take pride in a job well done when the station returns to full power operation, confident that the station will operate reliably until the next planned maintenance outage. That's our culture, and that culture of striving for excellence is growing.

So you have over 800 people with the same commitment to protect each other, protect the public, and the environment. Now we know something that the leadership of the 1970s were not as sensitive to, it's better to produce electricity without producing greenhouse gas.

There's a statistic that says over a 25-year period a nuclear plant the size of Point Lepreau prevents the burning of about 100 million barrels of oil. That is about one day's oil consumption. So turning off all the carbon emitting factories for one day. So one day's consumption of oil on the planet earth in 2016 is what the effect of Point Lepreau has been. That's something else to take pride in and that's also something that our scientists and governments believe in.

So the 800 responsible people who are

blessed to have good paying safe jobs at Point Lepreau who produce a product, some of which is exported and some of which keeps electricity costs reasonable in the province of New Brunswick, they also spend their money in the communities. When I go out shopping I see a lot of my colleagues out as well. When I go to a Sea Dogs game or a Kiss concert at Harbour Station I see many of my coworkers out as well. I also see my hard working coworkers contributing to their communities as coaches, volunteers, donors, et cetera.

We care for our community. As New Brunswickers we appreciate our way of life and the quality of life that we have here with strong family ties and a clean environment. Point Lepreau helps provide this.

As NB Power Point Lepreau employees we appreciate our jobs and we have always ensured that our plant is operated safely and with quality. We understand the responsibility our communities and families entrust us with. As a person engaged in these responsibilities, I recommend a five-year operating licence renewal for the Point Lepreau Generating Station.

Thank you for your time.

THE PRESIDENT: Thank you. Questions? Dr. McEwan.

MEMBER MCEWAN: Thank you for the

presentation. If I look at your career, you've had a number of quite markedly different jobs going through Point Lepreau. So if I pick one of them, say radiation safety, as you move from one career path to that career path, what elements of training would you be given? How confident are you in the quality of the training, that you have enough background in what you will next be doing to be able to really excel at it?

MR. DYKEMAN: That's a really good question. For example, radiation protection, when I got to the station in 1991 we were given six weeks training in radiation protection. That was the basics of -- that was fundamentals, classroom training in radiation protection. That was followed by two weeks of applications, learning about the different areas of the station and what the hazards were in each area.

As you gained experience in that area, you were given responsibility to look after people as they worked on different parts of the station during station outages, so you were a protection assistant.

It's changed since I was in that role. But at the time you were given just-in-time training to ensure that you were familiar enough with the job and familiar enough with the hazards of the job by people with more experience than I had so that you could adequately provide

protection for those contractors who were working on the station components. So that was one area.

Moving forward about, you know, 10 years from that point, when I entered the licensed operator program, that's a very rigorous training program where coming from an engineering background I was put on shift for a while so I would learn the fundamentals of operating a station, how the different systems worked, then into classroom training which included general station-specific training, radiation, further radiation protection training, and then a very detailed simulator program that ended with a test that was monitored by the Canadian Nuclear Safety Commission. That was about a four-year program for me, and that training and testing prepared you very well for operating the station.

MEMBER MCEWAN: So through all of those positions, how much autonomy did you feel you had to say no or to say stop or to say this isn't safe, we really shouldn't be doing this until some action is taken?

MR. DYKEMAN: Andrew Dykeman, for the record.

At anytime in the jobs we were allowed to say stop when we're executing a task. I can think of a specific time that we stopped a job based on radiation fields and evacuated the area. It was something that you

discussed before you started a job like that and something you were aware of and something that you understood what the actions were when you saw that action limit.

There is no consequences to anything like that, that was what you did. That is ingrained in you, to do the right thing when you're working on station systems at Lepreau. You have safety in everything that you do.

MEMBER MCEWAN: Thank you.

THE PRESIDENT: Ms Velshi.

MEMBER VELSHI: A couple of questions. One, the CNSC Staff had in the past identified procedural non-compliances initially at Lepreau, and that has since improved, and certainly over the last little while.

But in your positions that you've had and your experience, what would you have attributed that to or did you even see it as an issue?

MR. DYKEMAN: Andrew Dykeman, for the record.

I believe it's just a growing culture. The conception of procedural compliance again is something that is growing. As our understanding gets better at procedural compliance, we're better to police it. At this point, every operation, everything that we do is driven by procedures and those procedures are executed by going through a pre-job brief to ensure people understand the procedures before

they execute them.

In the past, and again I have to go back very far before I can think about a time when procedural compliance maybe wasn't as important or didn't seem to be as important. I think clarifying expectations was a big part of it.

You know, from the time I got licensed, those expectations built, got clearer, were reinforced more. Until you come to a point today, when it's very easy to coach somebody, you should follow the procedure this way when you something, and at the same time it's extraordinary almost if somebody comes and goes to execute something without a procedure.

So again, growth, improvement in expectations, enforcing expectations, better ability to coach, those are the kinds of things that are moving us toward excellence in procedural compliance.

I'm sorry, did I answer your question?

MEMBER VELSHI: You partly did. But if I were to tell you that two years ago the regulator had identified procedural noncompliance as a very big issue, would that have come as a surprise to you and does that come as a surprise to you today, that a couple of years ago the regulator was very concerned?

MR. DYKEMAN: Andrew Dykeman, for the

record.

It's a bit of a surprise, because in the control room where I had typically worked, again everything we did was procedurally driven. I'm trying to think about times when that wasn't the case and I can't think of many. So I'm a little bit surprised. I know there are a lot of other areas in the station that use procedures. I can say that in the control room procedure use and adherence is something that we always do.

MEMBER VELSHI: Did you want to comment on that?

MR. PLUMMER: I do. Brett Plummer, for the record.

I think to put a little perspective around the procedure concerns a couple of years ago from the regulator, NB Power went through a refurbishment period for an extended period of time, almost four years, and the plant got into a construction mode versus an operating mode. We also lost a lot of experience through retirees at that time. The procedures, some procedures, not necessarily the ones in the control room, there's different areas, were written for people that had that experience in some cases.

So then we move back into operation, we have a fairly young staff, and to get the procedures to where they need to be, which we've done. To reinforce the

expectation that you need a procedure to touch the plant, and if the procedure's not right, then you stop and you fix the procedure. So it is a transition, it's an evolution, but we've come a long way. As the Staff has also commented on, we've much improved.

MR. FRAPPIER: Gerry Frappier, for the record.

If I could add a bit to that. In our findings about procedural non-adherence and that it's important to note that it was never about the control room and control room operators, this was more associated with maintenance procedures and some of the things that were happening in the field. So coming to somebody who is working in the control room, I would not be surprised that they would not have seen that.

MEMBER VELSHI: What I was trying to assess is if the licensee gets a bad report card from the regulator, how widely is that shared within the plant and all staff. It may not apply to them directly, but clearly, you know, you are part of the leadership there in setting the culture there and I just wondered how widely known that was.

MR. PLUMMER: Brett Plummer for the record.

When we have an area for improvement like

procedure adherence, it is communicated throughout the whole organization in many different ways, but I will give you one example. Prior to the last outage we went ahead and we put everybody in the plant, including contractors, through a dynamic human performance lab. So we called it a DLA, human performance DLA, and part of that was to reinforce the expectations around procedures and process adherence. And there is no secret, so we are very open, we communicate the area we need to improve upon, we sit there and give the appropriate training because we believe training is the foundation to performance. And then we get out there and we reinforce, we do observations and we coach to get the appropriate behaviour. And we coach each other, not just management to workers but workers to workers. We all try to coach each other to improve excellence. So it's very well communicated across the site.

THE PRESIDENT: I'm sure that all 800 employees now are watching us in action, right.

MR. PLUMMER: I'm sure they are. Brett Plummer for the record.

--- Laughter / Rires

MR. PLUMMER: You know, even when we have like outages, we have all hands meetings, I mean literally all hands, all 800 employees through different periods, and we reinforce what we need to focus on to move forward to

excellence.

THE PRESIDENT: It seems to me that you have gone through many, many jobs. You would be an ideal candidate to take all the millennials coming in and taking them through some training. I don't know if they make use of your experience and expertise.

MR. DYKEMAN: For the record, I would embrace that.

--- Laughter / Rires

THE PRESIDENT: Okay, you have the final word. Anything you want to share with us?

MR. DYKEMAN: Andrew Dykeman for the record.

As a plant operator, I am very close in with operating the station and don't get to see this part of the nuclear industry very often. I have to say I do appreciate seeing and understanding all the aspects that the Canadian Nuclear Safety Commission looks at in approving a licence. It is something I hadn't seen before and I do appreciate that and I really appreciate the emphasis that you are putting on communication and bringing in the local communities and talking a lot about relationships and how we maintain those relationships and thank you for your time here.

THE PRESIDENT: Thank you.

So this is the end of oral presentations for today, but I think we have a little bit of time to do some of the written material. Marc, you will take us through them, as usual?

MR. LEBLANC: Yes. So I am going to go through each of the written submissions at least --

THE PRESIDENT: Well, first we have to find them, right.

MR. LEBLANC: That's correct. So I'm going to list them one by one as I give the CMD number and then ask if the Members have a question on each of those written submissions.

CMD 17-H2.2

**Written Submission from the
Town of Rothesay**

MR. LEBLANC: So the first written submission is the submission from the Town of Rothesay and it is at CMD 17-H2.2.

Any questions?

THE PRESIDENT: No.

--- Pause

CMD 17-H2.3

**Written Submission from
Atlantica Centre for Energy**

MR. LEBLANC: The next submission is from the Atlantica Centre for Energy in CMD 17-H2.3.

Any questions?

Monsieur Tolgyesi...?

MEMBER TOLGYESI: This is for NB Power. What are possible energy sources to replace what is a severe power off for any reason at Point Lepreau and for a longer time? Is it power which is coming from Quebec, from Maine or what?

MR. PLUMMER: Brett Plummer for the record. Is your question what replaces the power from Point Lepreau when it's offline?

MEMBER TOLGYESI: Yes.

MR. PLUMMER: It's a combination of whatever is best for the ratepayers of New Brunswick. So typically we plan our outages around -- our planned outages around the April timeframe to take advantage of the water running. We have a hydro station, Mactaquac, that picks up most of our load, but at times we also have to import power from Hydro-Québec as well. We also have some of our other stations, Coleson Cove and so forth, that actually chip in

also and produce power when we are not producing.

MEMBER TOLGYESI: In case Point Lepreau is shutting down for 18 months, it's a kind of long term --

MR. PLUMMER: Brett Plummer for the record. I hope we don't shut down for 18 months.

--- Laughter / Rires

MR. PLUMMER: We would have to sit there and run some of our other fossil generation facilities and we would also have to sit there and probably import power.

CMD 17-H2.4

**Written Submission from
Wayne Long, Member of Parliament,
Saint John-Rothesay**

MR. LEBLANC: The next submission is from Member of Parliament Wayne Long from Saint-John-Rothesay in CMD 17-H2.4.

Any questions?

CMD 17-H2.5

**Written Submission from the
St. George and Area Food Bank**

MR. LEBLANC: The next submission is from

the St. George and Area Food Bank in CMD 17-H2.5.

No questions.

CMD 17-H2.6

Written Submission from Stephen Smith

MR. LEBLANC: So the next submission is from Mr. Stephen Smith, CMD 17-H2.6.

CMD 17-H2.7

Written Submission from J.D. Irving, Limited

MR. LEBLANC: The next submission is from J.D. Irving, Limited, CMD 17-H2.7.

CMD 17-H2.8

**Written Submission from the
New Brunswick Community College**

MR. LEBLANC: The next submission is from the New Brunswick Community College, CMD 17-H2.8.

Dr. McEwan...?

MEMBER MCEWAN: So this is I guess for NB Power. I mean obviously the Community College is an important resource for you. How actively are you involved

in developing studentships and working apprenticeships and giving opportunities for the students to actually understand what the different roles in Point Lepreau would be and how they might build a career and build their résumé to get into that career?

MR. PLUMMER: Brett Plummer for the record.

We do get involved with NBCC or some of the community colleges. We are part of the advisory boards as well. It's not just Point Lepreau, it's NB Power in general as well. And we also have involvement with the curriculum to make sure that there is some introduction to nuclear power. But we also have co-op programs as well, so we bring in students during the summer and we also introduce them to nuclear power.

MEMBER MCEWAN: How many would then go on and look for a career with you, 2 percent, 10 percent?

MR. PLUMMER: Brett Plummer for the record.

It's a high percentage. I can't tell you exactly what it is, but in my experience it's typically over 90 percent.

CMD 17-H2.9

**Written Submission from the
New Brunswick Mentor Apprentice Program (NB-MAP)**

MR. LEBLANC: The next submission is from the New Brunswick Mentor Apprentice Program, or the NB-MAP, at CMD 17-H2.9.

CMD 17-H2.10

Written Submission from the Town of St. George

MR. LEBLANC: The next submission is from the Town of St. George, CMD 17-H2.10.

MEMBER VELSHI: Is St. George where your new emergency offsite centre is located?

MR. PLUMMER: Brett Plummer for the record. Yes, it is.

THE PRESIDENT: So is it now fully operational?

MR. PLUMMER: Brett Plummer for the record. It's not fully operational yet. There are plans and funding in place to get it operational this year.

CMD 17-H2.11

Written Submission from Maritime Electric

MR. LEBLANC: The next submission is from Maritime Electric, CMD 17-H2.11.

CMD 17-H2.16

Written Submission from David Small

MR. LEBLANC: The next submission is from Mr. David Small, CMD 17-H2.16.

Madam Velshi...?

MEMBER VELSHI: Again, a quick question for Lepreau and I didn't ask when we had a former intervenor. When you have your exercises, are fishermen involved in that and is that part of making sure that they get notified and know what to do?

MR. HICKMAN: Charles Hickman for the record.

When we design the exercises, we go through a detailed process and we are going to come back to it in more detail again tomorrow. But yes, we basically look at do we want to exercise the marine part of the existing plan. There is a whole section of the plan that covers the marine side. So our last Intrepid Exercise did

look at what the implications would be on fish, on actual landings where people could land the fish. Actually, the international aspect of the Intrepid Exercise included concerns from Maine fishermen as well. So yes, we did exercise that, it is included.

MR. LEBLANC: Mr. Tolgyesi...?

MEMBER TOLGYESI: Is it on an individual basis or is it through, I don't know, fishermen's organizations or something like that?

MR. HICKMAN: Charles Hickman for the record.

So again, I suspect that New Brunswick EMO will talk to this in more detail tomorrow, but the notification process doesn't just touch on community members. There is a notice to airmen that goes out so all aircraft in the area, send a Notice to Mariners, or NOTAM. They send that to all the marine vessels in the area, it's part of the federal government notification process. So that would go out to all boats in the area, typically on Channel 16, and they would be given instructions on where to go depending on what they have been doing. There are safe harbours identified as part of the response plan. So that would all be communicated as part of the notification process related to an event.

CMD 17-H2.17

**Written Submission from
Joey Baird and some members of the
Fundy Bay Senior Citizens' Club Inc.**

MR. LEBLANC: The next submission is from Joey Baird and some members of the Fundy Bay Senior Citizens' Club Inc., CMD 17-H2.17.

CMD 17-H2.18

Written Submission from Saint John Energy

MR. LEBLANC: The next submission is from Saint John Energy, CMD 17-H2.18.

CMD 17-H2.19

Written Submission from Cooke Aquaculture

MR. LEBLANC: The next submission is from Cooke Aquaculture, CMD 17-H2.19.

THE PRESIDENT: Go ahead.

MEMBER MCEWAN: So what struck me about this was the huge size of this fishery growing from a very, very small base, not a million years ago. How have they achieved that? How have they built it? It looks really

impressive on paper that they have been able to do that and create this industry.

MR. PLUMMER: Brett Plummer for the record. Kathleen Duguay will answer that question to the best of her ability.

--- Laughter / Rires

MS DUGUAY: Well, Kathleen Duguay for the record.

So I see that Marc is going through these written submissions today, so perhaps on Friday you will get a chance to do a nice little drive in the Bay of Fundy and see some of those installations that we have not very far from the station.

But Cooke Aquaculture has businesses all over the world, including Newfoundland, New Brunswick and some places in the States and in Europe. So I suspect the number that they are referring to here would include all those places in the industry.

THE PRESIDENT: But you know on the West Coast it's a big, big issue about conflict between the hatchery and the free fish. So was there any kind of conflict that you are aware of that's going on between the free fisher and the hatcheries?

MR. PLUMMER: Brett Plummer for the record.

We haven't heard of any conflict between the free fish and the actual aquaculture. We will say it is a big business in New Brunswick and if you do get a tour later this week you will see pens all up and down the coast of New Brunswick where salmon is raised.

THE PRESIDENT: Thank you.

CMD 17-H2.20

Written Submission from the Town of Shediac

MR. LEBLANC: The next submission is from the Town of Shediac, CMD 17-H2.20.

CMD 17-H2.22

**Written Submission from the
Saint John Regional Hospital Foundation**

MR. LEBLANC: The next submission is from the Saint John Regional Hospital Foundation, CMD 17-H2.22.

MEMBER MCEWAN: So you have a partnership with them. Do you help purchase equipment or refurbish rooms for patients or any sort of substantial contributions to the way in which the infrastructure of the hospital works?

MR. HICKMAN: Charles Hickman for the

record.

So our support at the station is in the area of emergency response and so we do provide both training and people during an event to support the activities. We provide equipment. We actually keep some equipment at the hospitals. The Foundation itself is essentially an organization that supports, through its own efforts, the hospitals. So it's not really the operational hospital itself. The Foundation is basically one of the bodies that helps generate funds and resources for the hospital. So we support the hospital in a direct fashion, basically along with the EMO, as we do not just the Saint John Hospital but also the St. George Hospital as well.

MEMBER MCEWAN: So you wouldn't support it indirectly through the Foundation?

MR. HICKMAN: I'm not aware that we do. I'm sure if I misspoke I will be informed tonight and I will bring that back to you tomorrow, but I'm not aware that we do any direct support to the hospital outside of the emergency planning support.

CMD 17-H2.23

Written Submission from

Rick Doucet, Minister, Energy and Resource Development

MR. LEBLANC: The next submission is from the Honourable Rick Doucet, Minister, Energy and Resource Development, CMD 17-H2.23.

CMD 17-H2.26

Written Submission from

Patty Bent and Richard Young, Campobello VillageMart

MR. LEBLANC: The next submission is from Patty Bent and Richard Young, Campobello VillageMart, CMD 17-H2.26.

CMD 17-H2.27

Written Submission from Timothy L. Curry

MR. LEBLANC: The next submission is from Mr. Timothy Curry, CMD 17-H2.27.

CMD 17-H2.29

Written Submission from

TJ Harvey, Member of Parliament, Tobique-Mactaquac

MR. LEBLANC: The next submission is from TJ Harvey, Member of Parliament for Tobique-Mactaquac, 17-H2.29.

CMD 17-H2.30

Written Submission from the Fundy Shores School

MR. LEBLANC: The next submission is from the Fundy Shores School, CMD 17-H2.30.

CMD 17-H2.32

Written Submission from

John Weir, Point Lepreau Chief Warden

MR. LEBLANC: The next submission is from John Weir, Point Lepreau Chief Warden, CMD 17-H2.32.

Madam Velshi...?

MEMBER VELSHI: Are these warden services unique to Lepreau or is it for all emergencies across New Brunswick?

MR. HICKMAN: Charles Hickman for the

record.

Again, I believe that EMO can speak to this in more detail tomorrow, but the warden service is unique to the Point Lepreau response plans. It is also I think one of our real strengths. These are wardens who live, work in the community and give us a very, very good hands-on relationship and eyes on the community. They are actually employed by the province, by NB EMO, but they are a real strength for us.

THE PRESIDENT: So their role is to go door-to-door to make sure that everybody is aware in case of an emergency; is that correct?

MR. HICKMAN: So the wardens, they actually have a very extensive role. They are really the eyes and ears of the provincial EMO Department in the community. They have a role in day-to-day activities. They (off microphone) more detail. The emergency area is split up into a series of zones. Each zone has an assigned warden or pair of wardens. Their job is to be completely aware as to who lives in the area, who has moved into the area, who has left the area.

As part of that, they maintain a regular demographic database. So they divide and go door-to-door to talk to every individual in the community, generating a demographic database of how many people live in that house,

if they have any physical disabilities, any transportation limitations, all about the pets, the children, horses, cats, dogs, anything else in that house.

So on a day-by-day basis they are eyes and ears on every single house in the community. As part of that process, they are the people who distribute both information and KI pills are distributed by the wardens. They also ensure that the community members are familiar with the evacuation notification process and are hooked into it and it is working for them. This is all done in between any events. Otherwise, it's just part of the day-to-day activities that the warden is involved in.

When we actually have an exercise or when we are doing training, the wardens have specific roles and responsibilities during an event, which would include supporting the evacuation, going door-to-door, but also identifying other people who might be in the area, campers, hikers, hunters, fishers and so on who might be in the area who may need to be contacted to help move them out of the area.

So they have a very detailed role. They are funded through and equipped by NB EMO and they really are the eyes and the ears and very much a hands-on essential service that is provided from an emergency planning point of view. They are a great, great resource.

THE PRESIDENT: Does that include the indigenous communities?

MR. HICKMAN: Charles Hickman for the record.

So the zones that are covered within the emergency plan do not explicitly include any First Nations communities, but the plan covers anybody who might be in the evacuation zone or the emergency zone during an event. So whether it is a First Nations member or whether it is Charlie Hickman going down there to go hunting today and an event occurs, they will find me and they will tell me to get the heck out of town if that's what's required. So whether it's First Nations or other people coming into the community for whatever purpose, for instance campsites, those people will be contacted. And again, NB EMO tomorrow I'm sure can give you some more details.

CMD 17-H2.34

Written Submission from Mark Wilson, PTech

MR. LEBLANC: The next submission is from Mr. Mark Wilson from PTech, CMD 17-H2.34.

CMD 17-H2.36

**Written Submission from
Hon. Stephen Horsman, Deputy Premier,
Legislative Assembly of New Brunswick**

MR. LEBLANC: The next submission is from the Honourable Stephen Horsman, Deputy Premier, Legislative Assembly of New Brunswick, in CMD 17-H2.36.

CMD 17-H2.38

**Written Submission from the
Atlantic Cancer Research Institute**

MR. LEBLANC: The next submission is from the Atlantic Cancer Research Institute, CMD 17-H2.38.

CMD 17-H2.39

Written submission from Gilles Allain

MR. LEBLANC: The next submission is from Mr. Gilles Allain, CMD 17-H2.39.

CMD 17-H2.41

Written submission from J. Smith Excavating

MR. LEBLANC: The next submission is from J. Smith Excavating, CMD 17-H2.41.

CMD 17-H2.43

Written submission from Joel Levesque

MR. LEBLANC: The next CMD or submission is from Mr. Joel Levesque, CMD 17-H2.43.

CMD 17-H2.44

**Written submission from the
Saint John Port Authority (Port Saint John)**

MR. LEBLANC: The next submission is from the Saint John Port Authority (Port Saint John), CMD 17-H2.44.

CMD 17-H2.46

Written submission from J. Curtis Nason

MR. LEBLANC: The next submission is from J. Curtis Nason, CMD 17-H2.46.

CMD 17-H2.47

Written submission from the Town of Quispamsis

MR. LEBLANC: The next submission is from the Town of Quispamsis, CMD 17-H2.47.

CMD 17-H2.48

Written submission from Laurie Comeau

MR. LEBLANC: The next submission is from Laurie Comeau, CMD 17-H2.48.

Madam Velshi...?

MEMBER VELSHI: I think it was the previous intervenor said that you requested them to submit a letter of submission. Is that fairly typical of all these submissions we have received?

MR. PLUMMER: Brett Plummer for the record.

Kathleen Duguay will answer that question.

MS DUGUAY: Can you repeat, please?

MEMBER VELSHI: I said it was the previous submission from the Town of Quispamsis which says that they submitted this in support of your application because you requested them to submit this application. And so my

question was are most of these written submissions if not all submitted to us at your request?

MS DUGUAY: Kathleen Duguay for the record. When we approach a community to support us for whether it's a licence renewal or for any other type of activities that may occur, part of their process is for us to do a request in writing for the town and municipalities. So in our letter we would have to indicate the purpose that we are asking to meet with them and what we are looking for in terms of support.

CMD 17-H2.49

**Written submission from the
Faculty of Engineering, Université de Moncton**

MR. LEBLANC: The next submission is from the Faculty of Engineering, Université de Moncton, CMD 17-H2.49.

Dr. McEwan...?

MEMBER MCEWAN: So again, presumably this is a symbiotic relationship whereby by you would benefit from co-op students and from graduates. Do you support research programs at the university? Do you support any specific educational programs at the university?

MS DUGUAY: Kathleen Duguay for the

record.

Université de Moncton is a French university and NB Power has engaged with the French university on a co-op program. We have some of our employees at the station that are employees now that were part of that co-op program in engineering.

MEMBER MCEWAN: Do you provide any opportunities for obtaining a post-graduate degree, say while they are employed with you? Do you support any research programs there?

MS DUGUAY: NB Power as a whole is in discussion in developing a research program in Université de Moncton at the moment.

MR. LEBLANC: Mr. Tolgyesi...?

MEMBER TOLGYESI: Do you have a policy or approach where you give preferential treatment to graduates from New Brunswick universities and colleges?

MR. PLUMMER: Brett Plummer for the record.

We can find out to be certain but I don't think we -- through the hiring process, through the vetting process I don't believe we -- you know, you get extra points for coming through the University for New Brunswick. I do think you will be better prepared to work in New Brunswick or the station, but we'll find out for certain.

CMD 17-H2.50

Written submission from HAWK Marketing Service

MR. LEBLANC: The next submission is from
HAWK Marketing Service, CMD 17-H2.50.

CMD 17-H2.53

**Written submission from the
New Brunswick's Building Trades Unions**

MR. LEBLANC: The next submission is from
the New Brunswick's Building Trades Unions, CMD 17-H2.53.

CMD 17-H2.54

Written submission from Coastal Enterprises Ltd.

MR. LEBLANC: The next submission is from
Coastal Enterprises Ltd., CMD 17-H2.54.

CMD 17-H2.56

**Written submission from the
Town of Saint Andrews**

MR. LEBLANC: The next submission is from

the Town of Saint Andrews, CMD 17-H2.56.

CMD 17-H2.60

**Written submission from the
Boilermaker Contractors' Association of Canada**

MR. LEBLANC: The next submission is from the Boilermaker Contractors' Association of Canada, CMD 17-H2.60.

CMD 17-H2.62

Written submission from Dave Wilson

MR. LEBLANC: The next submission is from Mr. Dave Wilson, CMD 17-H2.62.

CMD 17-H2.64

Written submission from Jennifer Lennox

MR. LEBLANC: The next submission is from Ms Jennifer Lennox, CMD 17-H2.64.

THE PRESIDENT: Did I get it right? This is the woman who won recognition?

MR. PLUMMER: Brett Plummer for the record.

She is and, you know, just to put a little bit more flavour on that, again we are continuously trying to improve and she was putting together a heated exchange -- an enhancement to our heat exchanger program and that's where she went to EPRI to sit there and get the information to come up with an excellent program.

THE PRESIDENT: So do you have a program -- I assume she is the younger generation. So do you have a program that allows you for a transfer of your knowledge, retaining your knowledge from those that retire?

MR. PLUMMER: So we do have a plan through our succession where we're looking -- we actually have approval to overstaff for the knowledge transfer. We have evaluated each of the positions to determine how much time is needed to sit there and transfer that skill.

So we have something in place but we need to improve that from a more formalized standpoint to make sure that we have benchmarked because we have talked about we constantly look outside ourselves to see who else does it better?

And we have learned that others have a more formalized program through the training department. And so we are looking at that to improve that process.

CMD 17-H2.67

Written submission from

Matt DeCoursey, Member of Parliament, Fredericton

MR. LEBLANC: The next submission is from Matt DeCoursey, Member of Parliament, Fredericton, CMD 17-H2.67.

CMD 17-H2.68

Written submission from the

Association of Professional Engineers and Geoscientists of New Brunswick

MR. LEBLANC: The next submission is from the Association of Professional Engineers and Geoscientists of New Brunswick, CMD 17-H2.68.

CMD 17-H2.70

Written submission from the

Northern Harvest Sea Farms

MR. LEBLANC: The next submission is from the Northern Harvest Sea Farms, CMD 17-H2.70.

Madam Velshi...?

MEMBER VELSHI: It's a comment more than a

question for Lepreau. I find these submissions from these fishers and these aquaculture farms and so on extremely reassuring that it hasn't impacted the sea. They are fishing and, you know, I am sure they are obsessed with the quality of water and your stewardship of that.

It's very reassuring. I just want to commend you on that. Thank you.

CMD 17-H2.71

Written submission from Stéphane Boucher

MR. LEBLANC: The next submission is from Mr. Stéphane Boucher, CMD 17-H2.71.

CMD 17-H2.75

**Written submission from the
Connors Brothers Clover Leaf Seafood Company**

MR. LEBLANC: The next submission is from the Connors Brothers Clover Leaf Seafood Company, CMD 17-H2.75.

CMD 17-H2.77

Written submission from BWXT Canada Ltd

MR. LEBLANC: The next submission is from BWXT Canada Ltd, CMD 17-H2.77.

CMD 17-H2.80

Written submission from Lyman Crawford

MR. LEBLANC: The next submission is from Lyman Crawford, CMD 17-H2.80.

CMD 17-H2.81

Written submission from Holly Breau

MR. LEBLANC: The next submission is from Holly Breau, CMD 17-H2.81.

THE PRESIDENT: So this individual is giving you compliments on the 2017 calendar. So did you get lots of feedback on that particular calendar you sent out?

MR. PLUMMER: Brett Plummer for the record.

I'll have Kathleen Duguay speak to that.

MS DUGUAY: Kathleen Duguay for the

record.

As you know, we live in a very small community so there is a local store that everybody gathers after their day at work for a bag of chips or a pop and to go home. So we distributed those calendars all throughout the community but we also left some at the store for some people that may want to -- you know, may have not gotten it or somebody that's visiting in the community. But the feedback that we got from that is that it was very informative.

We also provided opportunities and we did some focus groups with the community on the feedback from those calendars for the next one for next year so that we could make some improvements to it. We are going to continue to do so.

We also met with the senior folks from the community and we did a presentation with them and we brought with us our emergency preparedness folks to answer any questions that they may have about the calendars.

So it's a long answer, but what I wanted to say is that the community is very pleased with the calendar and we have also shared those calendars with folks from members of the public that had expressed interest in our station operation around the emergency preparedness file which includes Mr. Dalzell and other members of the

Greater Saint John area.

THE PRESIDENT: Thank you.

CMD 17-H2.82

Written submission from Eileen Mawhinney

MR. LEBLANC: The next submission is from Eileen Mawhinney, CMD 17-H2.82.

CMD 17-H2.83

Written submission from Local Service District

MR. LEBLANC: The next submission is from Local Service District, CMD 17-H2.83.

CMD 17-H2.84

**Written submission from the
Town of Grand Bay-Westfield**

MR. LEBLANC: The next submission is from the Town of Grand Bay-Westfield, CMD 17-H2.84.

CMD 17-H2.86

**Written submission from the
United Way of Central New Brunswick**

MR. LEBLANC: The next submission is from
the United Way of Central New Brunswick, CMD 17-H2.86.

CMD 17-H2.87

Written submission from Darlene Weir

MR. LEBLANC: The next submission is from
Ms Darlene Weir, CMD 17-H2.87.

CMD 17-H2.88

Written submission from Lester and Helen Hyslop

MR. LEBLANC: The next submission is from
Lester and Helen Hyslop, CMD 17-H2.88.

CMD 17-H2.90

**Written submission from the
Construction Association of New Brunswick**

MR. LEBLANC: The next submission is from
the Construction Association of New Brunswick, CMD

17-H2.90.

CMD 17-H2.91

Written submission from the

United Way, serving Saint John, Kings and Charlotte

MR. LEBLANC: The last written submission is from the United Way, serving Saint John, Kings and Charlotte, CMD 17-H2.91.

Madam Velshi...?

MEMBER VELSHI: So a question, not on this intervention, but I was surprised that we didn't get an intervention from your liaison committee and maybe you got them from individual members of the committee. Was there a reason why?

MR. PLUMMER: Brett Plummer for the record.

Kathleen Duguay will answer that question.

MS DUGUAY: Kathleen Duguay for the record.

Actually we do. Chief Wayne Pollock, in his submission in person tomorrow, he is representing the Musquash Fire Department and he is also representing the co-chair of the community relation group.

THE PRESIDENT: So this brings us to the

close of the hearing for today and the hearing will resume tomorrow morning at nine o'clock.

Thank you for your participation and attendance today. Have a nice evening.

--- Whereupon the hearing adjourned at 8:51 p.m., to resume on Wednesday, May 10, 2017 at 9:00 a.m. /
L'audience est ajournée à 20 h 51 pour reprendre le mercredi 10 mai 2017 à 9 h 00