Canadian Nuclear Safety Commission

Commission canadienne de sûreté nucléaire

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par vidéoconférence

Commission Members present

Ms. Rumina Velshi
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Dr. Timothy Berube
Dr. Marcel Lacroix
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Ottawa, Ontario / Ottawa (Ontario)

--- Upon commencing on Thursday, November 26,
2020 at 9:00 a.m. / L'audience débute le
jeudi 26 novembre 2020 à 9 h 00

Opening Remarks

THE PRESIDENT: Good morning and welcome to the continuation of the public hearing of the Canadian Nuclear Safety Commission on the application from Canadian Nuclear Laboratories Limited, CNL, to amend its waste facility decommissioning licence of the Douglas Point Waste Facility.

Mon nom est Rumina Velshi. Je suis la présidente de la Commission canadienne de sûreté nucléaire.

I would like to begin by recognizing that our participants today are located in many different parts of the country. I will pause for a few seconds in silence so that each of us can acknowledge the Treaty and/or traditional territory for our respective locations. Please take this time to provide your gratitude and acknowledgment for the land.

--- Pause

LA PRÉSIDENTE : Je vous souhaite la bienvenue, and welcome to all those joining us via Zoom or

webcast.

For those who were not here yesterday, I would like to introduce the Members of the Commission that are with us today remotely: Dr. Sandor Demeter, Dr. Stephen McKinnon, Dr. Marcel Lacroix and Dr. Timothy Berube.

Ms Lisa Thiele, Senior General Counsel to the Commission, and Marc Leblanc, Commission Secretary, are also joining us.

I will now turn the floor to Mr. Leblanc for a few opening remarks.

Marc...?

MR. LEBLANC: Thank you, Madame la Présidente.

Bonjour, Mesdames et Messieurs, et bienvenue à cette audience publique de la Commission canadienne de sûreté nucléaire.

The Canadian Nuclear Safety Commission is about to resume the public hearing on the application by Canadian Nuclear Laboratories, or CNL, to amend its Waste Facility Decommissioning Licence for the Douglas Point Waste Facility.

During today's business, we have simultaneous interpretation. Please keep the pace of your speech relatively slow so that the interpreters have a

chance to keep up.

To make the transcripts as meaningful as possible, we would ask everyone to identify themselves before speaking. Those transcripts will be available in about 10 days.

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 closure of the hearing.

As a courtesy to others, please mute yourself if you are not presenting or answering a question.

As usual, the President will be coordinating the questions to avoid having two people talking at the same time. During the question period, if you wish to provide an answer or add a comment, please use the Raised Hand function.

Four intervenors are scheduled to present this morning, and the Commission will also be addressing all of the written submissions before the final rounds of questions. We anticipate ending around lunch time, but if we need to go beyond we will do so.

Before we start, I would like to remind intervenors appearing before the Commission today that we have allocated 10 minutes for each oral presentation and I would appreciate your assistance in helping us to maintain

that schedule.

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

I would ask that once your presentation is over and the associated question period that is linked to your presentation is also over that you leave the Zoom session. You will be able to continue following the hearing via the live webcast on the CNSC website. Please ensure that that webcast is turned off when you are making your presentation.

President Velshi...?

THE PRESIDENT: Thank you, Marc.

The first presentation today is by Concerned Citizens of Renfrew County and Area, as outlined in CMD 20-H4.18.

I understand that Dr. Ole Hendrickson will present this submission.

Dr. Hendrickson, over to you.

CMD 20-H4.18

Oral presentation by

Concerned Citizens of Renfrew County and Area

MR. HENDRICKSON: Thank you, Madam Chair. Ole Hendrickson, for the record.

I appreciate the opportunity to make this brief presentation today. I am the volunteer researcher for Concerned Citizens of Renfrew County and Area. We are a non-governmental volunteer organization working to prevent radioactive pollution and encourage cleanup and responsible long-term management of nuclear industry wastes.

I received a PhD in ecology in 1981, did a post-doc at Guelph and worked as a federal research scientist and science advisor before retiring in 2012.

Canadian Nuclear Laboratories proposes to shift Douglas Point decommissioning waste to Renfrew County, specifically to Chalk River Labs. CNL would put as much of that waste as possible in the so-called near-surface disposal facility.

CCRCA's concerns about the NSDF project -- a giant mound, 1 million cubic metres of radioactive and hazardous waste, the seismically active area on the Ottawa River, a Heritage River supplying drinking water for

millions of Canadians -- these are well documented in our submissions on the environmental assessment of this project.

Ontario Hydro operated the Douglas Point reactor and produced its waste. It became Ontario Power Generation in 1999. As the waste producer, Ontario Hydro, now OPG, should, according to the 1996 Radioactive Waste Policy Framework, "meet their funding and operational responsibilities in accordance with approved long-term waste management plans."

So, why can't OPG and CNL coordinate waste management and decommissioning activities at the Bruce site? Why send low- and intermediate-level waste to Chalk River when OPG's Western Waste Management Facility is right at Bruce? What is the long-term management plan for the Douglas Point waste? Why approve active decommissioning when there is no long-term management plan?

Wouldn't it be better to defer decommissioning and keep waste onsite until a long-term plan is approved so as to avoid the additional worker radiation exposures, transport risks, GHG emissions and cost involved in double handling of waste.

Madam Chair, yesterday you noted that Douglas Point would not be the first CANDU reactor to receive a decommissioning licence. CNSC granted one for

the Gentilly-2 reactor in 2016. The G-2 record of decision quotes a Hydro-Québec representative as saying:

> "...that radioactive waste from Gentilly-2 will be stored onsite and that a transfer plan does not exist at present."

He added:

> "...if a site for the long-term storage is selected, studies and consultations would precede the transfer."

There have been no studies and consultations for the transfer of Douglas Point waste to Chalk River.

In CELA-14, CNSC staff disposition this lack of a long-term management plan. They say it is okay to ship waste to Chalk River because it has a licensed storage facility. We say waste transfer is a shell game with unnecessary cost and risks that merely transfers burdens to future generations.

Does the Commission have a view on this?

For Licence Condition 11.1 on waste management, the *Draft Licence Conditions Handbook* lists the CNL integrated waste strategy as one of the compliance verification criteria. This strategy would create an

interim consolidated storage site for high-level federal waste at Chalk River. Other federal waste would be permanently disposed of in the NSDF.

The Commission has never discussed this integrated waste strategy. There has been no public consultation. The Commission never approved consolidated interim storage of high-level waste at Chalk River. The Commission has not accepted the NSDF proposal. The Government of Canada last week launched a consultative process to modernize its radioactive waste policy framework by developing a policy and strategy.

CNSC's use of CNL's integrated waste strategy to verify licence compliance certainly appears to constitute acceptance of the strategy and its elements such as the NSDF.

In CCRC-1 staff disposition our concern, saying:

> "Not all licensee documents referenced in the LCH require CNSC acceptance." (as read)

So is it okay for CNSC to simply ignore the government's radioactive waste policy framework and not worry if a licensee has no long-term waste management plan or if it is using an unapproved plan?

Our group has submitted eight petitions to

the Auditor General related to radioactive waste management, particularly on lack of oversight of efforts to reduce the $8 billion federal nuclear liability, which includes Douglas Point and five other shutdown federal reactors.

We documented the major shift in waste management strategy in 2015 when foreign corporations and SNC-Lavalin were hired to address the waste liability quickly and cheaply. Tax dollars are being spent, buildings are coming down and waste is piling up at Chalk River in temporary storage such as the sea cans piled up at Waste Management Area H. This creates pressure on the condition to approve the NSDF and apparently CNSC staff have already succumbed to this pressure.

Lack of oversight is illustrated by CNSC's Safety and Control Areas, SCAs. There is no decommissioning SCA. The waste management SCA only applies up to the point where waste is removed from the facility. That SCA covers decommissioning planning, but not decommissioning activities. Who then monitors CNL's decommissioning activities at Douglas Point and other sites to ensure they are done safely?

Our view is that Canada needs an independent decommissioning and waste management authority, like many other nuclear nations. CNSC cannot play this

role. As taxpayers we should all care that CNL, a privately owned corporation, has no financial guarantee other than a five-year-old letter from a Minister in the Harper government. That letter increasingly looks like a blank cheque. CNL has no detailed plans for decommissioning activities to be completed at Douglas Point during the licence period. DDP1, the program overview, is not a detailed plan.

Accelerated decommissioning, uncoordinated decommissioning on the Bruce site, waste transfers to Chalk River, we can discuss how much of a departure DDP1 is from the PDP. Regulatory Guide G-219 says:

> "The detailed plan is normally a refinement and procedural fleshing out of the work package structure established in the preliminary decommissioning plan." (as read)

The Commission should be concerned about the flimsy cost and waste inventory estimates in DDP1. It should consider implications for other licensees of superseding a PDP, noting that financial guarantees are predicated on PDPs. We recommend that CNL be required to submit a revised licence amendment application, including detailed plans and costing for all decommissioning activities to be completed during the licence period.

Dr. Krugmann's report shows major discrepancies in estimated quantities of decommissioning waste between DDP1, CMD 20-H4.1 and earlier documents. These discrepancies, which indicate that waste has not been properly characterized, must be reconciled before active decommissioning proceeds. A CNSC waste characterization info graphic says:

> "CNSC staff carefully reviews the applicant's waste management process, including characterization before providing a licence." (as read)

Before providing a licence for active decommissioning at Douglas Point, the Commission should review documentation showing that CNSC staff completed a careful review of waste characterization.

Waste characterization matters. Nuclear facilities contain lots of concrete. Some concrete will be contaminated with radioactive substances such as tritium, carbon-14, chlorine-36, calcium-41, strontium-90 and plutonium. Many are difficult to measure. How will it be determined how much concrete is clearable? How much concrete would go to local landfills for other local uses?

CNSC staff says CNL will prepare waste characterization reports before detailed decommissioning plans are finalized. We are asking the Commission to

require that these reports be completed and reviewed before a licence amendment is granted.

CNL says the disposition of the waste will be determined using the following list of options in the order of decreasing preference: reuse offsite, recycle offsite, dispose offsite, waste management. So recycling is preferred over landfill disposal. In recycling, concrete waste is crushed into rubble and can be used for road gravel, retaining walls, landscaping gravel, et cetera.

If CNL incorrectly deems that concrete waste from Douglas Point is clearable, local municipalities may end up with radioactive concrete rubble spread around for fill, for landscaping, for roads. Imagine driving on a gravel road on a hot summer day, breathing clouds of radioactive dust.

To summarize, no CNSC commitment to oversee decommissioning activities, no detailed decommissioning plans, current plan superseded, questionable waste and costing estimates, no waste characterization reports, no long-term management plan for decommissioning waste. Given these deficiencies and uncertainties, can the Commission possibly make a determination that carrying out the proposed decommissioning activities at the Douglas Point Waste

Facility is not likely to cause significant environmental effects in accordance with section 67 of *CEAA, 2012*?

We recommend that the Commission not amend the licence.

Thank you again, Madam Chair, for the opportunity to make this presentation. I would be happy to answer any questions Commissioners may have.

THE PRESIDENT: Thank you very much for your presentation, Dr. Hendrickson.

Let me open the floor for questions and we will start with Dr. McKinnon.

MEMBER McKINNON: Thank you, Dr. Hendrickson. You raised a number of very important points.

So I would like to ask a question to CNL and it is in connection with the shipping of low- and intermediate-level waste to Chalk River Labs rather than storage onsite. And to some extent this has been discussed with the questioning yesterday, but a point that hasn't been brought up is, you know, the relative balance of the risks between storing it at the site and the added risks involved with transportation.

So, you know, how do you balance these two factors, centralized storage at Chalk River and the added risks of the transportation? So if you could address that point.

And also, can the waste be better managed at Chalk River than if it were stored at Douglas Point and what makes this so?

THE PRESIDENT: Mr. Gull, please.

MR. GULL: Yes. Mike Gull, for the record.

Just before I address that question I would just like to say as a starter that the transport of radioactive waste is something which occurs all over the world, generally in accordance with IAEA regulations and is a well-established kind of route that is available to the nuclear industry to enable it to safely consolidate its waste. So we do consider obviously transportation risks as well as the environmental impact of such transportation, and generally speaking, you know, they are very manageable and very low levels of risk. I think if you look at our record of transportation and events that we haven't had, I think that should give you some reassurance on that.

In terms of the balance between leaving it at Douglas Point versus transferring it to Chalk, I mean as a responsible operator we have -- as I am sure the Commission will recall, the vast majority of the volume and tonnage of our waste is already at Chalk River and we do have, as a responsible operator and under our licence, a suitable set of arrangements in waste management areas for

dealing with a range of wastes.

So for me, coming to the last part of the questions, one of the key advantages of consolidation at Chalk is that actually that puts -- perhaps that puts out all the waste for which we, as the owner and licensee, are responsible for in a place where it can be overseen by a series of suitably qualified and experienced personnel who will continue to learn over the many decades that that waste will reside at Chalk and provide, if you like, a better ownership and stewardship of that waste than could necessarily be provided at Douglas Point, notwithstanding the kind of organizational learning that we are talking about.

If we effectively have centres of excellence for dealing with and storing and managing low-level waste and intermediate-level waste and high-level waste at Chalk River, it makes sense from an overall balance of risk, given the low and manageable risk of transportation, to consolidate it at Chalk River rather than have groups of waste dispersed around the country. That thinking is behind our integrated rate structures, you have consolidation. It is better to consolidate, have it in one place where we can manage it, and then ultimately, you know, when the final disposal routes for the various wastes which are determined, they are then getting managed

and packaged and dealt with in a way that can be consistent for all of our waste from one centre of excellence rather than, you know, a number of satellite sites spread throughout the country. So I submit that, you know, I firmly believe that the consolidation strategy is both safe and appropriate.

THE PRESIDENT: Thank you.

MEMBER McKINNON: Thank you.

THE PRESIDENT: Thank you.

Dr. Demeter...?

MEMBER DEMETER: Thank you very much for your thoughtful presentation.

I am going to take a slightly different angle to Dr. McKinnon's question. So the question that they dealt with is sort of the risk of transport. I am going to ask CNSC and perhaps CNL: have they done an assessment from an ALARA point of view on collective occupational dose differences between handling it at Douglas Point and then transferring it to Chalk River and then unpacking it versus handling it locally, if in fact Bruce had the capacity to manage the waste from Douglas Point decommissioning?

So what is the difference in -- from an ALARA point of view, what is the difference in collective occupational dose between the two strategies,

qualitatively? Probably not quantitative, but qualitatively. I will start with CNSC.

MS MURTHY: Thank you and good morning. I am going to ask Ms Candida Cianci as the Director of CNL Regulatory Program Division to start the response and hand off to the specialist. Thank you.

MS CIANCI: Candida Cianci, for the record.

So really at the heart of it is that we ensure that they are following an ALARA program as part of their radiation protection program and that what we have assessed in terms of their performance and continue to do so is that CNL applies ALARA measures for any handling of radioactive waste in a robust manner.

With respect to what will come as part of the detailed decommissioning plans for each planning envelope, it's our expectation, from our perspective, that they provide us with what the dose estimates will be, a good understanding of what the work will be, what the hazards are. And, when we'll be reviewing those, it'll be to make sure that they've got the appropriate RP measures in place and that they're -- that they're within regulatory dose limits.

CNL is also bound by the action levels that they've recently revised and we've accepted to meet

regulatory requirements. So when -- when that comes in, those action levels are of a more sensitive nature than they were for the storage with surveillance action levels that they had previously.

And so when those detailed decommissioning plans come in, we'll be reviewing to see whether those action levels are appropriate based on the estimates and the hazards related to each of those planning envelopes and making sure that those are adequate indicators for whether they're within the controls.

So I'll pass it off to our radiation protection colleagues as well to compilate my answer.

MS PURVIS: Good morning. For the record, it's Carolyn Purvis. I'm the director of the Radiation Protection Division.

Thank you for your question, Dr. Demeter. As we discussed yesterday, we don't yet have the detailed information to -- from CNL with respect to the worker doses associated with the various planning envelopes.

So CNSC staff is not aware of the estimates and, at this time, both qualitatively and quantitatively, we do not have that collective dose comparison.

But, as Ms Cianci has indicated, this will be part of our review when we receive those detailed plans.

With respect to the comparison between the doses associated with having the waste managed at Douglas Point versus Chalk River, that's an aspect we could look into but yet we'll be anticipating the receipt of those detailed plans before doing any kind of assessments.

MEMBER DEMETER: Okay, thank you. I'll leave the further questions until the final round on that issue. Thank you.

THE PRESIDENT: But let me follow up on that question. You're going to get these detailed decommissioning plans in chunks? I guess the question is, how are you looking at it from an overall perspective? That, if instead of, you know, Package A or Package B or C, I guess B and C are the two big ones where there will be more low level waste.

How are you looking at the overall decommissioning or the waste strategy to say we haven't looked at the options of keeping it on site, perhaps having it stored on the blue site, even for the longer term versus sending it to Chalk River? Does the CNSC even expect to make that comparison at any time?

MS MURTHY: Kavita Murthy, for the record. I'm going to pass this question to Nancy Greencorn, the Acting Director of the Waste and Decommissioning Division.

I do want to start off by saying that the

requirement for maintaining worker doses and control over worker doses is very much a factor that goes into our review of the action levels that the licensee or the proponent proposes. And the fact that these action levels are set well below the regulatory limits and, as the work packages are developed by CNL, that each aspect of the work package has an assessment of the doses that will be received by workers as well as the action -- the controls they're going to have in place.

These are -- these are normal parts of work packages and normal parts of the reviews that we have done thus far for all the decommissioning activities for the Douglas Point as well as at all of the other sites where this approach is being used.

Over to you, Nancy.

MS GREENCORN: Good morning. Nancy Greencorn, for the record. This actually gives a little bit of an opportunity to clarify a question as well that was asked yesterday with what are the expectations also in regard to the international Safety Standards.

So there was one yesterday asked, I think, by Dr. Demeter on -- as is specified in the Safety Standards.

So looking at what the GSR Part 6 on decommissioning has for waste arising is that, if a

disposal facility is not available, that the waste will be safely stored in accordance with regulatory requirements.

So first out stating that is the requirement that is set out in the Safety Standard.

But, going further to that, in the regulatory document 2.11.2 that will be approved by -- that was approved by the Commission and will be published in December, and based on the international Safety Standard, there is an expectation that CNL take into account the interdependencies in all the steps of waste.

This includes taking into account the characterization of waste, the implications of transport and disposing of waste. Or rather, put another way, the optimizing of how these options for decommissioning are played out in the interdependencies.

So, for facilities with more than one licensed facility, that's why we had that overarching decommissioning plan, and in that plan we expect to be able to see how these interdependencies are played out. And then this is furthermore clarified in the individual decommissioning plans, as we said, where we start to see those dose assessments so we can see how the dose has been considered and optimized in the process.

MS MURTHY: Thank you, Nancy. I would like to have Mr. Ramzi Jammal wrap this up, please. Thank

you.

MR. JAMMAL: It's Ramzi Jammal, for the record. I'd like to put things in perspective for our commissioners and I thank Dr. Hendrickson for raising the issues.

I would like to go back to it with respect to the risk of transport. We do assess the risk of transport and we have significant experience with respect to environmental assessment and potential impact during transport.

In the transport itself, the inherent safety is taken into consideration with the packaging. So we did the analysis as the Commission members now remember when there was a transport of the liquid from the FISS tanks transported to the U.S. The fuel, which is the highest stress, was a liquid fuel to be transported that was done safely over times, even we did the environmental assessment and the impact with respect to the risk from car accidents to potential spills and even was tested in the courts in the U.S. with respect to the environmental assessment and they accepted the CNSC risk assessment.

Now I'd like to go on Dr. Demeter's question with respect to the ALARA principle and effective dose to the workers. We have significant experience in Canada with legacy issues from Port Hope to Hope Granby G2

we spoke about yesterday. Madam Velshi mentioned that the decommissioning of G2, which was then at a time, the highest activity or activated parts of the reactors being decommissioned.

So we go back to the principle of the ALARA and the program. Our staff did review the ALARA principle and CNL applies the ALARA principle at other legacy sites.

So we are taking the ALARA principle as a program and then now putting the implementation of the program on the licensee's plans so that we are applying verification to what is in the program is being applied in the field.

So my colleague spoke about the action levels. Those will be introduced as part of the activity that's being done.

Now, to remember with respect to the packaging, there was a requirement that they should put in place with respect to packaging before they package the substance which includes the doses of the workers for the handling. Those are being applied through the ALARA principle with respect to verification of contamination outside the package, at the time of packaging removal to the time it arrives to its destination.

So all these programs are being engulfed

and put together as part of the assessment and the implementation to ensure that what the safety case presents and the uniqueness of the activity once they start to do it, based on the phased-in approach, and the non-prescriptive approach that we have in Canada, determines our reports to you, the Commission, based on the activity and the oversight of the CNSC staff.

THE PRESIDENT: Thank you, Mr. Jammal. Let's move to Dr. Berube. Dr. Berube? We can't hear Dr. Berube. Maybe we'll move to Dr. Lacroix and then come back to Dr. Berube. Dr. Lacroix?

MEMBER LACROIX: Yes, thank you very much, Dr. Hendrickson for your presentation. This is a question for CNL and I want to make sure that we get the right information. We already have the information but I want a confirmation from CNL.

Dr. Hendrickson raised his concern about the high level waste and, from this -- for this licence amendment, the high level waste, that is the spent fuel, will remain in the canisters. It will remain under storage and surveillance, right?

THE PRESIDENT: Mr. Schruder?

MR SCHRUDER: Good morning, Kristan Schruder, for the record. Yes, that is correct, Dr. Lacroix. The spent fuel will remain in the canisters under

storage with surveillance during this licensed amendment, this proposed licensed -- amendment licence.

MEMBER LACROIX: Thank you very much.

THE PRESIDENT: Okay. Dr. Berube. We can't hear you.

MEMBER BERUBE: Hello?

THE PRESIDENT: Okay. Much better. Yes.

MEMBER BERUBE: Sorry about that. My mic dropped out for some reason. Problems with compatibility issues. I apologize for that. Thank you very much for your presentation.

My question pertains to something Dr. Hendrickson brought up with regard to inspection frequencies with regard to CNSC inspections.

And looking at the documentation, the inspections over the last few years have been, on site, maybe one per year, I think that is correct.

CNSC, if you could, please talk to me about the frequency and compliance inspections that you've been carrying out as we move from, you know, really inactive structures to active structures, through low level waste into intermediate waste as we get into the actual reactor facility itself per envelope 3 in particular because we're pulling that part of this forward. Thank you.

MS MURTHY: Kavita Murthy, for the record. I'll start out by giving you a good quick overview of how we set our inspection frequencies and how we set our requirements for compliance monitoring activities. Broadly based on the activities that take place at the facility, we set what we call a baseline compliance program, which is based on the facility's risk proximity of sensitive bodies, structures and populations, public risk, radiation risk.

And, based on that, given the types of activities that were going on at the site at this point in time, the facility was adequately -- under adequate regulatory oversight with one inspection and the number of reporting requirements that the CNSC has.

Going forward, should there be an increase in the types of licensed activities and an increase in the complexity of activities, we do have the ability, on an annual basis, to review the activities that the licensee is proposing to do and adjust our plans accordingly so that we are looking at all aspects that are important for that particular activity.

I would like to ask Kevin Ross, who's the lead project officer for this file, to please provide additional information.

MR. ROSS: Kevin Ross, for the record. So, as Kavita Murthy mentioned, CNSC staff us a risk

informed approach for compliance at all of our sites.

During the current storage with surveillance period, you are correct to say that we've had about one or two inspections per year. The years in which two inspections occurred, that second inspection was a security-based inspection.

This frequency of one to two per year is aligned with the current low risk facility and the type of inspections we've been doing there have all been what we refer to as general Type 2 inspections, so they're inspections that are crosscutting across multiple SCAs rather than focusing on specific programs.

Moving forward, we are going to continue to assess the risk of the facility as it may or may not change throughout the decommissioning period and, if it does change, we can either realign our compliance baseline frequency, so increase by default the number of inspections we do each year; or we can assess individual activities that are ongoing and determine if we need to just add additional inspections specific to the activities that are taking place at any given time.

But, yes, you are correct about the number of -- frequencies of inspections that have taken place so far and that, moving forward, we will constantly reassess the inspections and compliance we do for the site to align

it with the risk of the ongoing activities. Thank you.

MS MURTHY: Thank you, Kevin. I -- Kavita Murthy, for the record. I also want to add something that is very important, particularly for this site and given the current COVID situation, we do have a Bruce site office that the CNSC has a fully staffed cohort of inspectors who are all trained and who are familiar and who are living in that area.

So even if there's a need for us to urgently respond to an event, we have inspectors who are fully empowered to go and take action that is required.

So, in terms of compliance verification, we feel that, with the staff at the Ottawa offices as well as the site staff at Bruce, we have good coverage.

THE PRESIDENT: So I have a question for CNSC staff. This is Dr. Hendrickson's point around the integrated waste strategy and is it part of the licensing basis or not.

And I've seen staff's disposition of this comment but I'm not sure I fully understand it.

If staff is going to carry out its compliance verification against this integrated waste strategy, isn't that a tacit acceptance of this strategy?

And help me understand, you know, the Commission has not approved this strategy. Does the

Commission have to? Has there been public consultation on it? What is the value of this integrated waste strategy when it comes to our overall regulatory requirements?

MS MURTHY: Kavita Murthy, for the record. I'll pass this question to Candida Cianci for a response, thank you.

MS CIANCI: Candida Cianci, for the record. So I do want to take this opportunity and thank Dr. Hendrickson for this comment. As you noted, Ms Velshi, it is in the proposed LCH but, upon further review, we have looked at it and not all CNL documentation that's referenced in the LCH requires CNSC acceptance, this being one of them, the Integrated Waste Strategy.

But, upon further review of that and looking and taking into consideration the intervenor's comment, we do agree with the intervenor that this should not be a document that's listed as compliance verification criteria. It is a guiding document that speaks to the strategic approach on how waste will be managed for all CNL sites.

So what we're proposing to do is to take it out of the compliance verification criteria section of the LCH and have it referred to as a guiding document in the preamble. So, with that, we would make that change prior to finalizing the LCH.

So we did want to take this opportunity to share that with the members and with the intervenor.

THE PRESIDENT: Thank you for that, Ms Cianci, but then what are the next steps regarding this Integrated Waste Strategy? Where does it go? What role does the Commission and the public have in reviewing and commenting and approving it, if any?

MS MURTHY: Kavita Murthy, for the record. Before passing it on to Candida once again to provide a response, I do want to say that this feedback that we got from Dr. Hendrickson, we are going to apply it to other licenses. We are reviewing all of the licenses that we have -- that the Commission has issued to CNL to make sure that this correction is made to all of them.

So, once again, Dr. Hendrickson, thank you. Candida, over to you for a response to that question. Thank you.

MS CIANCI: Thank you, Ms. Murthy. I was remiss in mentioning that. So Candida Cianci, for the record.

So, as I mentioned, it is a guiding document and it's meant to -- the purpose is meant to support the integrated strategy that CNL has. As we mentioned, we're -- we don't prescribe what the waste strategy will be and what this document is meant to be is a

living document that CNL continues to update as their processes change and as things may change in how they're implemented.

So we don't view this as a document for CNSC acceptance but it does help guide us in terms of understanding how the strategy may change over time. And, like I said, it's an evergreen document.

THE PRESIDENT: Thank you very much for that. My next question also to CNSC staff is another issue raised by Dr. Hendrickson which is around which SCA addressed the execution of decommissioning. And, as said in his statement, that the waste one talks about decommissioning planning but under which SCA is the actual execution of decommissioning reviewed and assessed by CNSC?

MS MURTHY: Kavita Murthy, for the record. So the major activities that are going on, on the Douglas Point site are related to decommissioning. To that end, a lot of the programs that are reviewed are reviewed with the perspective of the decommissioning activities. That is really the crux of the licensing activity for that licence.

So decommissioning, in and of itself as a special safety and control area, puts a box around the documentation and all the programs that are reviewed. But, as a licensed activity when all that site is doing is decommissioning, then everything, management systems,

radiation protection, environment, all of that pertains to decommissioning.

THE PRESIDENT: Similar to, like, refurbishment, I guess?

MS MURTHY: Exactly.

THE PRESIDENT: Okay. Thank you for that. And I know that Dr. Hendrickson also raised other questions around the waste inventory but I know there are other intervenors that have raised that so we will come back to that.

I'm looking to see if my colleagues have their hands up. So I don't see any so, Dr. Hendrickson, over to you for any final comments, please.

DR. HENDRICKSON: Thank you, Madam Chair. I just wanted to point out that next month there is a public meeting where the regulatory oversight report for CNL sites will be discussed.

So the Commission will have an opportunity to revisit some of the matters and some of our concerns which are perhaps outlined in greater detail in the submission our group has made for that public meeting.

We have broader concerns, I think, that go beyond what is going to be discussed in this licence hearing about nuclear governments in Canada.

As I noted, there is a review that's being

led by Natural Resources Canada on nuclear policy and the modernization of the radioactive waste policy framework and there's also some attempt to develop a strategy for radioactive waste management in Canada and noting that CNSC is non-prescriptive when it comes to a management strategy nonetheless. It's quite an important issue for members of the public, what strategy will be used for decommissioning as well is radioactive waste management.

So I hope that the Commission can be tuned -- plugged into some of these important developments as well.

And just one more comment, if I may, which is that our group participates on the Chalk River Laboratories Environmental Stewardship Council, which is one of the ways that we find most useful to learn more about not just the Chalk River facility but we are finding that that Council is increasingly used to provide information about other sites that are operated by CNL. We had that presentation from Ian Bainbridge about the Douglas Point decommissioning.

And there are pros and cons to that of course, but when we are hearing about Douglas Point at Chalk River, we sort of wonder, well, are there local people in Douglas Point hearing. We wonder how indigenous groups in Canada are being informed about the broader

aspects of waste management, waste strategy at the federal sites that are being operated by CNL.

And just one last comment. It is a bit disappointing that at the last two Environmental Stewardship Council meetings there was no CNSC representative present and that is a bit of a change from previous meetings. It would be helpful to have the CNSC present at those meetings so that if licensing or regulatory issues do arise then there is a way for the public to be informed about those.

Thank you, Madam Chair.

THE PRESIDENT: Thank you. And thank you, Dr. Hendrickson, for your submission.

Let's move on to our next intervention and it is a presentation from the Canadian Nuclear Workers' Council, as outlined in CMDs 20-H4.14 and 20-H4.14A.

Mr. Bob Walker is here to make the presentation. Mr. Walker, over to you.

CMD 20-H4.14/20-H4.14A
Oral presentation by the
Canadian Nuclear Workers' Council

MR. WALKER: Good morning, President Velshi and Members of the Commission.

I am just trying to figure out how to take control of my presentation. I don't have the right buttons around my screen for some reason.

THE PRESIDENT: Someone else is taking care of it for you, Mr. Walker.

MR. WALKER: Perfect.

MR. LEBLANC: Mr. Walker, just ask us to change the slides and we will do it for you.

MR. WALKER: Okay. Could you go to the next slide, please.

I am Bob Walker, I am the National Director of the Canadian Nuclear Workers' Council.

Next slide, please.

The Canadian Nuclear Workers' Council is comprised of unions representing workers across Canada's industry. That goes right from Saskatchewan in the uranium mines and mills through fuel fabrication in Ontario, nuclear power plant operation maintenance, construction refurbishment, medical isotopes, nuclear research and development, nuclear waste handling and decommissioning. Our membership also includes District Labour Councils.

For today's purposes we do have the Grey/Bruce Labour Council as one of the members. We have members of SPEA that are working at this plant site right now. We have obviously members working for Bruce Power and

OPG at the Bruce site, and we have members working at the Chalk River site.

Next slide, please.

So the Council was formed in 1993 and our goals are to ensure the perspectives of nuclear workers are heard by decision-makers; strengthen the collective role of nuclear workers by way of their unions; enhance public knowledge about the many benefits of the nuclear industry; and ensure that the public dialogue is based on facts.

We do this in a number of ways. We participate with industry. I sit on the Board of the Canadian Nuclear Association. We deal regularly with the regulator; we publish a newsletter seasonally; we have a website; we have a social media presence, although not a very good social media presence. I am working on that. We do have an annual conference at locations across our industry. So we try to go from Saskatchewan through locations in Ontario, New Brunswick and kind of work our way through those locations. And of course our Board meets regularly.

Next slide, please.

So this is something -- as I say, I have been to a number of CNSC hearings and public meetings now and I say something similar to this in every intervention. There is nothing more important than the health and safety

of our members. And it is not just self-serving because we believe that if our members are protected at work, then their communities are protected, the environment is protected. When our workplaces are safe, it is better for the environment, and when our workplaces are safe, our communities are safer. Our members work around the sites -- live around the sites where they work, sorry, and we take our responsibilities very seriously. There is nothing more important. We are not just workers in industry, we are residents of the communities.

Next slide, please.

So for Douglas Point -- and I know you heard all of this yesterday, so I will try to be fairly quick. The Douglas Point Generating Station was a 200MW CANDU reactor, an SMR, owned by AECL -- and this is a complicated part. I had a hard time wrapping my mind around why things were different here.

So the facility is owned by AECL, it is managed by CNL on behalf of AECL on a GoCo model. It is on an OPG site. That OPG site is leased by Bruce Power and the reactor was operated by Ontario Hydro, but now it has turned back to AECL. So it is a little bit of a complicated arrangement.

In 1984, Douglas Point went into a safe shutdown state, defuelled, dewatered, and since '87 it has

been in Phase 2. The proposed amendment will allow Douglas Point to proceed to Phase 3 decommissioning and the decommissioning activities, as we talked about already yesterday and today, will take place in a number of planning envelopes. Detailed decommissioning plans will be approved by CNSC ahead of time and CNSC staff will continue to provide oversight. Phase 3 is expected to continue for up to 50 years and community consultations will continue through this period.

Next slide, please.

So in preparation for today, we did review the CNSC staff assessment of the proposed licence amendment, we participated in a web-based information session, and we did have an online meeting with CNL, both Nuclear Workers' Council, the Provincial Construction Building Trades and Laborers' International Union of North America. And in response, the CNWC does support CNSC staff's assessment, we agree with CNSC staff's conclusion that CNL is qualified to carry out the activities, and we support CNL advancing Douglas Point to the next phase of decommissioning.

Next slide, please.

CNL has made adequate provisions for the protection of the environment and health and safety of persons. The proposed amendment is not likely to cause any

significant adverse environmental effects, and through past performance CNL has demonstrated that they can satisfactorily manage all of the SCAs.

This is where I want to pause for a moment and say we are not in a position to fully endorse the project. The reason we are not in the position to fully endorse the project is we don't know who is going to be doing the work. As I said earlier on, our support for nuclear projects is based on the fact that our member unions represent people who are going to be doing the work. In this case we don't know who is going to be doing that work.

Next slide, please.

So decommissioning work will be contracted out by CNL. That is already happening at Douglas Point, so we know that work will be contracted out, but we don't know who the contractor will be. We don't know who the contractor will be, so we don't know where they will get the skilled workers required to do this work. This is an unusual situation and it arises because of that complex ownership management model that I discussed earlier. If this was one of the Bruce Units we know who would be doing that work, if it was Pickering or Darlington we know who would be doing that work, but at Douglas Point we don't.

We do know that CNWC member unions work

collaboratively with their employers on health and safety matters. We know that members of those unions will have all the skills that are required to do the work. We know that they will have that safety culture that comes with working in the industry. And, most importantly, as unionized workers they have protection and with that protection of the union they are more comfortable raising concerns and asking questions.

Currently we don't know who will be doing the work, so we can't give the assurances that we normally would give.

Next slide, please.

The Provincial Building and Construction Trades Council of Ontario and the Laborers' International Union of North America support the proposed amendment, but their support is with the expectation that this project will be completed by a union contractor. And it is important to note that unions do invest in training for their members as well. I mentioned that in the presentation.

The Ontario Association of Demolition Contractors is the employer bargaining agent on behalf of industry under the Ontario legislated ICI sector. And at the bottom of that slide you will see I have noted what the ICI sector is.

Next slide, please.

So just in conclusion, Canada's nuclear industry is a very important sector of our economy. It provides clean, reliable, affordable baseload generation that we require for our standard of living and it is leading the fight against climate change. It produces nuclear isotopes vital for our health care. It is a highly unionized industry and supports a number of high quality jobs for tens of thousands of Canadians.

The workplace health and safety standards in Canada's nuclear industry are second to none. Employers and unions in the industry work together to make sure this is so. Douglas Point led the way in the development of full-scale CANDU projects and now it will lead the way for future decommissioning projects.

Next slide, please.

The Canadian Nuclear Workers' Council supports CNL's application to amend the licence and allow Douglas Point to progress to Phase 3 decommissioning. We do encourage CNL to engage in meaningful dialogue with the construction trades and LiUNA. There has been some discussion already and we encourage that discussion to continue.

Next slide, please.

So in closing, I want to thank the

Commission for this hearing. I want to thank the staff and all the intervenors. This public process is very important for our safe workplaces. The continuous oversight of the CNSC and the CNSC staff make our workplaces safer and our communities safer. Thank you.

THE PRESIDENT: Thank you, Mr. Walker, for your presentation.

Let's start with Dr. Lacroix.

MEMBER LACROIX: Well, once again, thank you very much, Mr. Walker for your presentation.

The big issue here is that we want to determine who will do the decommissioning work and this is a question that I would like to ask to CNL, but in the perspective of that I am trying to understand and picture the whole process, the whole process on one hand of selecting a contractor and then the process of supervision of the contractor's work.

Concerning the selection of contractor, this is kind of an unusual project and I presume -- and I may be wrong, but I presume that the contractor or the contractors that will be selected to carry out the work are highly qualified and trained in handling hazardous as well as radioactive material. So I would like to hear it from CNL's point of view. How do you want to make sure that these people have the qualification to carry out the work?

And, on the other hand, once they start working onsite, who is responsible within CNL to make sure that they carry out the work properly, they handle the waste in a proper manner?

So these are essentially my two questions: the selection of the contractor and the supervision of their work.

THE PRESIDENT: Over to Mr. Gull, please.

MR. GULL: Mike Gull, for the record.

I am going to commence the answer to this question before handing over to Ian Bainbridge to discuss, if you like, anything kind of site-specific, but also obviously the final part of the question about who is responsible for site supervision.

So I think as CNL we have, if you like, an end-to-end procurement process which starts really with a decision about which scope is going to be executed by CNL staff and which scope could be usefully executed by the supply chain. That is part of our kind of planning processes.

Once we have kind of come to a view that we would be best executing through the supply chain, our processes for selecting suitable contractors really do start, in my understanding, through a prequalification process, you know, the skills and experience of that

particular contractor, which requires them to submit kind of evidence about their performance records and the kind of track record of performing similar work, which is then assessed by CNL before, if you like, the actual procurement request, request for price or request for quotation, is issued.

And then of course that is really analyzed in terms of not just the price or technical proposal, but quite often the kind of safety criteria, safety performance is a very significant part of the assessment and selection process.

And then of course we have -- in the later stages we have the kind of boarding processes and the kind of messaging to the education and training. And then we bring that through into mobilization, at which point, if you like, the emphasis changes to I would say post-contract, which is not only contract management but a very significant part of that is supervision and contract or management of the failed work to ensure that not only are they doing the work that we think they ought to be doing but they are doing it in the way that was agreed as part of the formation of the contract and in accordance with all the arrangements on the site.

Because ultimately, you know, CNL as a licensee is responsible for all of the work done on the

Douglas Point site, regardless of whether it is performed by our staff or by contractors. So our supervision, control and supervision of our contractors is a very significant part of what we do and how we ensure safety and the site execution of the work.

I think with that, I would like to hand it across to Mr. Bainbridge just to give a perspective from the site perspective. Please, Ian.

MR. BAINBRIDGE: Thanks, Mike.

Ian Bainbridge, for the record.

Yes. I'm not sure what more to add to Mike's statements there. I think it is a very good summary. Obviously we do go out for contracts for a lot of this work if we are not going to self-perform it. In there, in the specifications and in the evaluation of the bids that we receive, we do ensure that they have given us their evidence of their track record in being able to do this kind of work and the training they give and the safety reports they generate is part of that work. We do ensure they have a good, safe track record of doing this work.

Once they are selected, one of the first tasks they end up having to do is to produce what we call a work control package, which is a very detailed job hazard analysis, a work control plan, a radiological plan if necessary. We will thoroughly review that under what we

call a readiness review board and once we are happy they have identified the required controls, we will then give them authorization to start the work.

But then we have field supervisors who -- our own staff field supervisors who oversee the contractors doing their work and making sure that they are following those plans that we approved. So we do work that all the way through.

With respect to the union side of things, right now, as Mr. Walker pointed out, we do have SPEA representatives at the site already. Our technicians who are employed at the site are SPEA members, so they are already under that union. The main maintenance contractor we have right now is a company called ES Fox. They draw all of their labour from the local union halls, so they are already members of the local unions as well.

It has been our experience to date that when we do employ contractors to come in and remove the buildings we have already removed, they again employ local labour. It doesn't pay them to bring a lot of staff from a long distance away, so they go to local union halls and draw the labour from there. Again, they insist that they have the appropriate training. They provide us evidence they have the appropriate training before we will let them do the work. That is through the Canadian Nuclear Workers'

Council and other unions where they do get that training.

So we are already very much there, we just -- sometimes as we get into the more radiological work we have the real specific expertise within CNL, so we may want to use some of our own staff to go do that work and they would not necessarily be members of the Canadian Nuclear Workers' Council. That is the only difference there.

MEMBER LACROIX: Thank you very much.

THE PRESIDENT: Okay.

Dr. McKinnon....?

MEMBER McKINNON: Yes. Thank you for the presentation.

I have a question along similar lines and partly my questions have been answered already by the various replies, but I am curious about what is the -- this is a question for CNL. What is the mix between CNL workers and contractors on the site and how you plan to manage the interactions between them to maintain your safety culture?

THE PRESIDENT: Mr. Gull...?

MR. GULL: Mike Gull, for the record.

I think Douglas Point -- and I will refer a more detailed answer to Mr. Schruder after making some introductory remarks.

But at Douglas Point the balance, as we

discussed yesterday, we have about 12 to 20 staff at the moment and the ratio of contract workers of the order of 50 to 80 contract workers is very much going to be, if you like, the CNL team providing oversight and supervision of a larger contractor workforce.

I think, you know, we have lots of kind of interest, but if you look around our sites, you know, according to the kind of work that we have, the balance of contracted work to self-performed or work that we do with our own staff kind of varies tremendously. If you look at CNL in its current phase, you know, the bulk of the work is performed by our own staff, but as the program develops we are expecting to gradually increase the number of contracts that we have here in order to allow us to execute the program.

If you look at Port Hope, I would say of the scope performed every year, it is 75 percent I would say contracted support, with 25 percent supervision of oversight effectively from the CNL staff. So where we are heading to at Douglas Point is effectively the kind of balance and ratios that we already have down at Port Hope and we have been effectively safely kind of discharging our kind of obligations to that community, you know, with the same balance of workforce versus contractors as we are looking to execute it at Douglas Point.

So I think on that point if there is anything that you want to add, Kristan?

MR. SCHRUDER: Kristan Schruder, for the record.

I think the one thing I will add to that, Mike, is really just the comment about safety culture that you brought forward, Dr. McKinnon.

It is important to note that, you know, safety is paramount to CNL and we also ensure that it is paramount for our contractors that are doing work onsite. You know, we do participate in their pre-job reviews that they have with staff and post-job reviews at the end of the day to discuss any sort of safety concerns and ensure those are being addressed.

We have also included our contractors in safety pauses that we have undertaken as an organization. Sometimes we will have a pause of all work and we will review, you know, an event that may have happened or conditions at site, and we have incorporated our contractors as part of that as well so that we are incorporating them into our safety discussions to ensure that we are getting the full picture of any safety concerns onsite.

THE PRESIDENT: Thank you.

Dr. Demeter....?

MEMBER DEMETER: Thank you very much for your presentation. It was very useful.

This is a question for CNSC staff. Without getting into the politics of union versus non-union or the ideology issues, the intervenor makes the statement that currently we don't know who will be doing the work, so we cannot give these assurances relative to qualifications. But from a CNSC oversight and regulatory point of view in the nuclear industry, is there any significant difference in your inspections and compliance at worksites between union and non-union contractors or workers? We want to get assurance either way that things are being done safely. Any comment on that?

MS MURTHY: Kavita Murthy, for the record.

So you are right, we don't prescribe who should be hired. The bottom line for the CNSC is that safety is maintained on the site. There are requirements under management systems, safety and control area and human performance management, safety and control area that the licensees have proper training programs, proper protective equipment, proper processes for managing contractors. And at inspections we don't make a difference between whether we are inspecting a site that is run by a contractor or by CNL. What is required is for them to maintain full regulatory control and we inspect -- when we do an

inspection we are not applying different standards, so to say, depending on who is doing the work. So any accountability for safety and responsibility for safety sits firmly on the shoulders of CNL and they continue to be responsible for maintaining oversight.

We have come in front of the Commission a couple of times with event reports and these have been event reports that CNL has stood and explained to the Commission what happened and why it happened, but in some of those cases the people involved were not CNL staff, they were contractor staff. But that is not a metric for us. Contractor management is. We do review contractor management processes that CNL has and we have someone available to speak to that if you would like, but overall CNL remains responsible.

MEMBER DEMETER: Thank you. That answers my question. Thanks for verifying that.

THE PRESIDENT: Thank you.

Dr. Berube...?

MEMBER BERUBE: Yes. Can you hear me?

THE PRESIDENT: Yes, we can.

MEMBER BERUBE: Perfect.

Thank you, Mr. Walker, for that presentation. All of my questions have been satisfactorily answered at this point. Thank you.

THE PRESIDENT: Okay. Thank you.

So, Mr. Walker, you get the last word. Any comments you would like to make?

MR. WALKER: Yes, just one clarification.

Often my issue might be around regular staff versus contract staff. In a case like this that is not my concern or my issue at all. I understand that work like this is going to be done by contractors and any construction activity or decommissioning activity is going to involve a large number of contractors. For me it is ideology. I can't escape that, that is my life. Without any hesitation, I will stand on any chair safely and say that a union worker is safer than a non-union worker. And the reason I say that is because a union worker has a union standing behind them to protect them. If they ask questions, if they raise concerns, they have protection from the union to do that. And I know of many cases, luckily not in the nuclear industry, but I know of many cases where that is not the case, where non-union workers do not feel comfortable raising concerns. So I will always support a union worker.

So all we are asking for is that CNL when they are looking for contractors to do this work that they get a contractor that has a relationship with the union. And they already -- for the most part that is already

happening and we applaud CNL for that.

And just in closing, we do support this licence amendment. We think CNL's track record has been good, they have demonstrated they are capable of doing this work safely, and we support this amendment.

Thank you very much.

THE PRESIDENT: Thank you. Thank you for your intervention, Mr. Walker.

The next presentation is by Ms Anna Tilman, as outlined in CMDs 20-H4.22 and 20-H4.22A.

Ms Tilman, I am not sure whether you participated in this proceeding yesterday, but I would once again like to extend, on behalf of the Commission and CNSC staff, our heartfelt condolences on the passing away of your colleague Mr. Eugene Bourgeois.

CMD 20-H4.22/20-H4.22A

Oral presentation by Anna Tilman

MS TILMAN: Thank you.

Can you hear me?

THE PRESIDENT: Yes, we can.

MS TILMAN: Thank you very much. I will say something toward the end of my presentation as well. Thank you.

So we can start the presentation then. Would you mind doing the slides, Mario?

MR. LEBLANC: Yes, we will be doing them for you, if you just can tell us when to change slides, Ms Tilman.

MS TILMAN: Okay. You can change the first one right away. Change slide, okay.

We all know what the proposed amendment is, so I think the important thing I want to stress is the third bullet, that the proposed amendment would advance decommissioning activities beyond what is currently stipulated.

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As I have reviewed the documents there are some basic questions that I feel need to be asked of CNL.

One is the radiological/non-radiological hazards to the workforce and the training to protect them. We have heard a lot of discussion on this recently in the last intervention there. However, what I am concerned about is contract workers, because there is a difference in some cases between acceptable radiation doses to nuclear energy workers and contract workers. I have noticed this in dealing with Bruce Power and I wonder if they will receive -- if contract workers will receive the same level of protection as nuclear energy workers.

The next part is something I haven't heard much discussion about. It is fusion of materials released as a result of the work to be done and how that would affect the health and well-being of the workforce, the local community and the environment.

The next bullet deals with the inspections and frequency and monitoring required. My understanding in hearing some of the discussions before is that type I inspections are being used. There is a big difference in CNSC between type II, which are much more thorough, and type I inspections, which are cursory. So my question is what kind of inspections.

There is also a need as CNL moves forward into the decommissioning as to updating emergency and evacuation plans accordingly.

Then there is the question, what are the options to storing this waste other than shipping it to other locations such as Chalk River? We heard about this before.

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The current licence you are familiar with, so I will just mention this. This is what we are currently looking at. Phase 1 has happened, Phase 2 storage with surveillance, and Phase 3 final decommissioning and notice, approximately 50 years. That is just an approximation.

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What CNL has done in the past is remove several non-nuclear buildings. A big portion of this waste was declared as predominantly clean waste. I will talk about clean waste later on. I consider it an oxymoron. Some wastes were shipped to CRL and other licensed facilities. And that is in quotes because I don't know who these other licensed facilities are, what their nature is, what they do with the waste, and I think that is important.

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The proposed timelines, I found this rather confusing in going through CNL's documents and CNSC's document. It seems -- it wasn't clear at first, but it seems that things are being sped up. If I am wrong in my dates, please correct me, but this is a big concern, because there are issues posed by doing these rapid, more rapid decommissioning and what is the rationale or reason to hasten the timelines. If anything, I would say it's the opposite, let's not push something that we have -- we know can be much more dangerous if we try to shorten this timeline.

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Storing high-level waste. There is the indication that there will be a site selected, perhaps scheduled in a certain few years and whether to continue

interim storage of the fuel or not. Any dates that are being proposed for receiving such waste -- and the date was 2070 -- are speculative, we cannot count on that. In other words, I sort of think that we are stuck with it for a while, quite a while.

Next slide, please.

I have had to do this before in a number of hearings, the differences between low-level waste, intermediate-level waste and how these definitions have been altered. I have several different versions of these different categories and one of the issues I want to stress is the handling and shielding. LLW does not normally require significant shielding, that is fairly vague. This is not my language, this is language out of documents. And ILW often requires shielding. So there is a kind of vagueness in this and different degrees of what is considered one type of waste, what is considered another.

Now, there are advantages, if you like, for considering waste low level based on the way low-level waste is treated versus intermediate. Intermediate contains some of the same radionuclides and maybe less activity, but there as high-level waste.

Next slide, please. Next slide.

Getting to the low-level waste, this is where we come into clearance levels and likely clean waste,

which is really an oxymoron, if you like. If the low-level waste meets or is below these clearance levels or criteria, it is no longer considered radioactive and deemed to be likely clean. This means it can be sent offsite. You can't track it. And this also means that facilities, and the CNSC by the way, can say that the amount of waste has been minimized or reduced. Unfortunately, this is not reducing or minimizing it, but dispersing it in the public domain, because this waste is used in -- can be used in various products without any knowledge that it is so.

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This one is taken from a summary taken from CNSC's document as to waste estimates and I just want to point out that the estimates are given as volume and mass, that's it, and you will notice radioactive LLW there. And of course the high-level waste is not being done at this time.

Next slide, please.

Okay. You have given estimates in volume and mass, but what we need was a waste inventory, a waste inventory that specifies the specific radionuclides and the activity, and these have been done for various facilities, including Chalk River, CNL's operations there. I have seen inventories from there back in 2017. I mean it may not be that accurate, there may be differences, but it is

paramount that CNSC require CNL to provide an inventory, even if it is estimated, what is in this waste. Thank you.

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Turning the topic to something else, both CNL reported on radiological releases to air and water in becquerels. These were annual numbers. There were no differences within the year, nothing more specific than that. I have summarized that to just look at tritium, gross alpha, carbon-14. They did do gross beta.

What I am looking at is the magnitude if we look at the air releases. In one particular year the air releases were 10 times more than previous years, 10 times the factor. What is the explanation? How were these numbers obtained even? I have no idea. Where are these releases coming from? I think this needs clarification.

And the same regarding the water releases. Now, in CNL's report they demonstrate water releases through logarithmic graph. This was done in their presentation yesterday. This is not proper. When values differ by a magnitude of 10 you put them on a log scale. It can look fairly linear with a slope of close to zero. That is not a fact. But my question again is where are these releases coming from? How often are they checked? There were only yearly values.

My next comment related to this, the

derived release limits which are set for these specific radionuclides regardless of the facility. And there have been issues with the establishment of DRLs. So, as you can see they are magnitudes of seven higher than what the actual releases are. This is not untypical of other nuclear facilities. So you just wonder what level of protection they really do provide and this whole area is one for CNSC to review.

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I would like to address the issue of health issues. We need to look at the cumulative impacts of not just what comes out of DPWF and the work being done there but also the Bruce site, huge. As work is being done both at the Bruce site and at Douglas Point, there will be an increase in emissions, dust, contaminants, all kinds of hazardous substances, contaminants released to air and water, and increase in noise levels. And there are effects of exposure. Even if you look at the local population as being not big, the local communities in closest proximity downwind of the Bruce site will be most affected, and vulnerable populations of course in the typical groups of vulnerable populations that are affected. And the effects on human health and the environment aren't just a one-stop shop, they are cumulative. So this will take place years -- the effects could take place many more years later

than what the activities really are.

Next slide, please.

Decommissioning and clean-up activities specifically. This is an occupational health and safety issue. They do require a well-trained workforce. They must receive the highest level of protection from exposure to these substances. And we know decommissioning will be going on further and be an increased activity. If one tries to push this, to speed the rate of this work, one can have problems that are not anticipated and that cannot be reversed. Decommissioning will take time.

Next slide, please.

Again, the potential effect on workers. The cumulative, synergistic, long-term effects of both radioactive and non-radioactive substances exposures are not properly addressed or anticipated and they could be there. We have seen this happen at Bruce Power. The incident of alpha exposure is one to mention.

The potential for accidents is there and front-line workers are at risk. Do the emergency and evacuation plans currently take account of the nature of the hazards of the work involved and the people involved in it? And this is very important. What can be done to ensure that the safest, most thoughtful procedures are being followed in doing this kind of work and that the

workers are properly protected?

Next slide, please.

Groundwater. This is a lesson from the past. I will talk about this later, after my intervention I hope, because this is with respect to Eugene Bourgeois, who was very concerned about this. We know there was this radioactive waste operation site that stored waste from, I believe it is '66 to 1976. My dates might be a little bit off here. In the late 1990s radioactivity was discovered that escaped to groundwater and to the park wetlands. The reaction to this was to transfer the waste to OPG's waste facility, which was called RWOS2, now the famous WWMF.

What caused this? Their poor conditions of grouting and poor recordkeeping were noted weaknesses allowing waste to escape. I haven't seen any talk about these old sites and the contamination that I believe is still there from this old site and I would like to address that in a later way, but I feel I needed to bring this up in memory of -- one of the issues in memory of Eugene.

Next slide, please.

My final comments before recommendations.

Speeding up decommissioning is to be a no-go. It is too premature and too dangerous to undertake and why. It is shifting the onus of waste on the local area, the workers, future generations. That is not fair

nor is it just.

Shipping and dispersing nuclear waste is not a solution. This is one of the things we heard about Chalk River, the shipment to Chalk River. Is that fair to take it from one site, travel to another site, another water body? Also, some of this waste is being sent to places not accountable because they are considered cleared waste. We are just dispersing the waste, we are not controlling it.

What we need to do is make sure this site, the Douglas Point site, is kept under surveillance for a very long period and there is proper monitoring of contaminants.

Regarding the monitoring, I noticed mention was made of the different levels of tests, the type inspections that CNSC is using and reference was made to type 1 inspections. The CNSC might be aware that type 1 inspections are very cursory. Type 2 inspections have not been done and they are the detailed type of inspections that need to be carried out.

Next slide, please.

So the recommendations are for CNSC not to grant CNL its amended licence as requested. On the other hand, CNSC is requested to prepare detailed plans for each phase of decommissioning and clarify the status and

activity of each phase. And CNL should be required to produce a detailed inventory of radiological and non-radiological waste and not just a summary of amounts.

In terms of the licence term, a long licence is not good because it lacks the ability to allow public engagement and to review what is going on. So while I have here no more than 10 years, one has to -- if it goes longer than five years there has to be an opportunity for public engagement at the very least within a five-year interval.

Thank you very much. That is the end of my slides.

THE PRESIDENT: Thank you very much, Ms Tilman.

We will open the floor for questions and start with Dr. McKinnon.

MEMBER McKINNON: Thank you for your presentation and please accept my condolences for the loss of your colleague.

I want to understand a little bit more about the radiological situation at the site which you had brought up. So my question is to CNSC staff. Ms Tilman had a table in her presentation of radiological releases to air and water in the 2014 to 2019 period and what struck me was how the various emissions that were measured were many

orders of magnitude below DRLs. So I was just curious, how do those emissions that were measured compare to background levels that would be measured in that region of Ontario?

MS MURTHY: Kavita Murthy, for the record. For the response on this, I would like to call upon Ms Kiza Sauvé from the Health Sciences Centre and Environmental Compliance Division, please. You're muted.

MS SAUVÉ: I'm so sorry. Kiza Sauvé, for the record. I was prepared to respond to DRLs and the current levels. How it compares to background, I will have to do a little bit of confirming but the important, the really important message is that the releases are at about 0.01 percent of the release limits. So I can look and look at background.

Health Canada does do some monitoring in the area so I will look at that and I can look at it, how it relates to our IEMP sampling as well but what I can tell you is that the releases are extremely low.

So if you'd like me to get back to you, let me know. Otherwise --

MEMBER McKINNON: No, I mean the number that you quoted is extremely low. That's really what I was trying to, you know, establish. That, you know, these are extremely low general emissions.

So that will be sufficient. Thank you

very much.

THE PRESIDENT: Dr. Demeter.

MEMBER DEMETER: Thank you very much, Ms Tilman, for your presentation and my condolences, as well, for the loss of your colleague.

I wanted to ask -- you raised the issue of waste characterization between low, intermediate and high level waste. And I looked at the CNSC CMD and it talks about low, intermediate but it doesn't really give any granularity as to what those are from a definition point of view.

The CNL had a table with more details. Then I looked at the CNSC glossary, which identifies the characterization fairly generically in prose, radioactive solid waste, it typically exhibits levels of penetrating radiation sufficient to require shielding is intermediate.

I wanted to get a sense that, if you sent five people out to waste characterize that you had a prescriptive enough document that they would all come up with the exact same characterization and that it's consistent across CNSC, IAEA, and your CSA standard so that we're all on the same page.

Is there a prescriptive enough document or methodology that five different people would come up with the same waste characterization? That's to CNSC, I guess.

MS MURTHY: Kavita Murthy, for the record. I'll ask Nancy Greencorn to please respond to this question.

MS GREENCORN: Nancy Greencorn, for the record. So with respect to waste classification, in the recently developed regulatory document, specifically in this case Reg Doc 2.11.1, Vol. 1, there is definitions for the various waste classifications, including low, intermediate and high level waste.

These definitions were derived from the IAEA Safety Standard GSG-1, the Classification of Radioactive Waste. So, in this, we provide the definitions of waste.

Licensees, then, as part of their documentation, provide more specific criteria with respect to low and intermediate and high -- well, more specifically, low and intermediate level waste. And this is based on the safety case for their site.

So based on how they're storing the waste, what are the specific radionuclides that would be in the waste that is being provided. So there is a generic or a definition that's provided and it's an international definition. It's found in our regulatory documents.

But the precision of some of the radionuclides and different activity concentrations, those

are based on the site specific safety cases.

So CNL has a waste acceptance criteria defined, for instance, at their Chalk River Laboratory and so any characterization that would be done at the Douglas Point site, if they wished to send that waste to the Chalk River site, would have to characterize the waste to meet that waste receiver's waste acceptance criteria for low and intermediate level waste.

MS TILMAN: Can I make a comment on that?

MEMBER DEMETER: Just -- I --

THE PRESIDENT: Of course, Ms Tilman.

MS TILMAN: Can I make a comment?

THE PRESIDENT: Yes, you may.

MS TILMAN: Okay, thank you very much. The problem is, I've been going through all the different categories of waste, particularly the intermediate and low level waste, and they have morphed in time with the introduction of clearance levels that I believe came in around 2010/2011.

Once the clearance levels were set, and this is set by bodies to which there's no public engagement at all, it sets levels at which the waste can be cleared and then used for the purposes or considered to be "likely clean".

This is a very dangerous slope because how

these values are set? What happens if you've got more waste? The quantity of low level waste is one thing. The activity is another. Because there's so much low level waste, the storage becomes an issue.

So is the attempt to clear this waste and get it out into public use and reuse as recycle, is that a way of reducing the volumes of low level waste? By changing these definitions and calling and defining clearance levels.

It's, to me, a very dangerous tool and it's international. It's not just a Canadian tool. It's international and yet these clearance levels are set for all these various isotopes. I've been through this and no idea how one accounts for the amount of this waste. That's what I just wanted to put in.

THE PRESIDENT: Thank you. Well, Dr. Demeter, before we come to you, perhaps we can get CNSC staff to respond, if they have a response, to Ms Tilman's comments around clearance levels and who sets those and what's the CNSC's role in accepting those.

MS MURTHY: Kavita Murthy, for the record. I will start off by saying that the Nuclear Substance Radiation Device Regulations has schedules of unconditional clearance levels. However, I would like to pass this question to -- just give me a sec -- to Mr. Ramzi Jammal,

for his answer and then we will get support from specialists if we need it. Thank you.

MR. JAMMAL: Ramzi Jammal, for the record. I'd just like to compliment Ms Murthy the fact that currently, as we speak in Canada, such clearance levels are prescribed in our regulations.

Ms Tilman's raised a good point with respect to clearance level internationally. So the clearance level is not unique to Canada. Even though the definition has changed, every international, national authority has in place a clearance level. And we did do a benchmarking with respect to the characterization of waste, low level, intermediate level and high level.

On the clearance level, many of the decommissioning activities that are taking place around the world, I can make reference to the UK where the low level waste is actually cleared of approval via the UK Environmental Agency and that is actually managed and put into the public domain.

So the clearance level definition probably is being updated but there is no risk to the environment with respect to the values that are being put in place.

In the Canadian perspective, from a regulatory framework perspective, any time we have an amendment to the regulations, we follow the Government of

Canada regulatory process, which engages consultation of the public for their comments.

So, to date, in Canada, we have these clearance levels prescribed in our regulations and they have not changed to date. Kavita, if you would like to pass to the specialists.

MS MURTHY: Thank you, Ramzi. And, no, I believe the specialists are confirming that there is nothing more that they would like to add. Unless there's another question.

THE PRESIDENT: Thank you. Well we'll go to Dr. Demeter.

MEMBER DEMETER: Yeah, I just -- I guess, to put it more clearly, irrespective of the ability to receive the -- well, what I want to hear is that the ability to receive the waste, the clearance levels that are set by Chalk River, don't influence the classification of the waste. So you don't change the bar because, you know, their clearance levels are such that you might turn intermediate into low or low into intermediate.

Like, those prescriptions are set and the ability to accept it or not -- or depending on their ability to accept it or not but it doesn't change the definition of low, intermediate and high level waste. That's just what I want to hear.

MS MURTHY: I'll pass this to Nancy Greencorn.

MS GREENCORN: Nancy Greencorn, for the record. Yes, that's correct. As Mr. Jammal said, the clearance levels are prescribed in regulations and they are included in CNL's documentation. As well, I also forgot to mention mines and mills waste, which is a little bit off the topic today, but I will just say that there is another classification of waste in Canada. But, yes, those numbers are prescribed in regulations and their characterization procedures as a licensee much provide the assurances that they have the robust programs that, when they are monitoring their waste and it's going out, it meets those clearances.

If it does not meet those clearances, then it's treated as radioactive waste and treated as whether it's low or intermediate of a waste.

MEMBER DEMETER: Thank you.

THE PRESIDENT: And moving on to Dr. Berube.

MEMBER BERUBE: Yes, thank you very much for your presentation, Ms Tilman.

Yesterday, we had an interesting comment from Mr. Gull stating, basically, this is a massive waste handling operation, that's what going to happen here.

And as we're moving into envelope number 3, which is what really is under contention here for this hearing, that is going to be the focus of it, especially because most of the stuff that's going to happen there is going to happen within the reactor building itself.

So, Mr. Gull, if you could, just because you've stated that this is a massive waste clearance and handling activity, could you run through, on a very practical level, how your organization deals with waste categorization, determination, say, within the reactor building setting for us? Exactly what do you do? What do your people do when they go in and say, "We're going to look at these systems, we're going to characterize them, we're going to classify and make a determination as to what they are?" And then does that change with time, based on, you know, what -- the information you're getting. Could you go through that, please?

MR. GULL: Yeah. Mike Gull, for the record. I'm checking my notes here. So, yeah, I think, yeah, I'm glad you remembered that comment because it is a hugely important aspect of our work.

So we do start and this answers some of the questions that have come up, I think, during this intervention, we have inventories, which we base on, I would say, just initial characterization and histories of

buildings.

So we'll enter a building with a kind of -- an inventory and an expectation of what we're going to find in there.

And then the first phases of work really are, you know, generally, when you enter a building, there's historical, operational, I would say, kind of waste and SAC. You clear the building out.

And then you entertain, effectively, a characterization phase where you kind of characterize what you can characterize with the building and the situation it's in.

And then, during that phase, you develop your kind of waste management plan, which allows you to, if you like, plan the work so the waste that you create is kind of optimized. And I think the example of that is if you had a contaminated system like a metal pipe with contamination in it, if you left it in there and then demolished the building, you end up with, effectively, contamination stored within the waste.

Whereas, if you take that system out and then, you know, you deal with that at one particular waste category, that the rest of the building, effectively, can be a lower waste category. And, of course, you know, there are advantages for a number of reasons of getting the waste

to be the right category because you apply the appropriate level of control to it.

So, generally speaking, you can't always characterize everything when you go into a building. And I don't want to use another analogy and, in any way, kind of belittle this, but you progressively work your way through the building, increasing your knowledge and your characterization information and you ultimately end up starting with a room full of systems. You take the systems away, dealing with each one of those as it comes.

You end up with an empty room you characterize. Typically, you would then decontaminate inner surfaces of the room or stabilize waste and then you'd kind of move through it and into a bulk kind of, if you like, into the demolition phase where the whole thing and the way you sequence it and the way you plan your work is through a series of phases, as you work your way through the building.

And, as you work through it, your knowledge level increases. And, against every job, it is where you actually do the quantify kind of ALARA assessments in terms of optimizing, you know, the worker does it's going to be -- going to be received as opposed to by dealing specifically with a system as opposed to kind of leaving it within the bulk of the building.

So it's one of these things I could probably give a much over -- very, very over long answer to so I'll leave it there initially and see if there are any more kind of questions or clarifications.

THE PRESIDENT: Well, I guess Dr. Berube doesn't have a follow-up questions so we'll move to Dr. Lacroix.

MEMBER LACROIX: Thanks very much, Ms Tilman for your intervention. Quite interesting. You raised a number of very pertinent questions. And this is a question for CNSC, for staff.

I know I've already asked this question before but I'm going to ask you again for the purpose of public knowledge, I would like you to define what you mean by Derived Release Limits and how is it obtained?

Now, that's the first part of my question. The second part of my question is an argument. I'm a member of the public and I look at these Derived Release Limits and the emissions and I have a little scientific training behind me and, when I look at these numbers, I realize that the emissions are six orders of magnitude smaller than the Derived Release Limits.

So the conclusion that I may reach is that, well, these emissions are lost in the background noise. So I feel reassured. Or, on the other hand, I may

look at the Derived Release Limit which is six times six orders of magnitude larger and I might say, well, this is not the right measuring stick. So could you argue my arguments?

MS MURTHY: Thank you for that question. Kavita Murthy, for the record. I think we have the perfect person to respond to this, Kiza Sauvé is waiting so go for it, Kiza.

MS SAUVE: Thank you. Kiza Sauvé, for the record. So I'll start with -- so you've got two questions. The DRLs are obtained for using the CSA Standard N288.1.

So that we look at the particular radionuclide and what would have to be released from the facility to expose a representative person, so that's kind of the critical person that might be living at the fence line, eating, you know, and drinking water as close as possible to the facility, what would give them a dose of one milliSievert per year?

DRLs are often quite high. You are correct. Because the amount of exposure required to get to that dose of one milliSievert per year is quite high.

So this method of establishing release limits, so we're using the word DRL, Derived Release Limits, we are going to be moving to terms such as licensed limits and release limits.

We are looking at publishing a new regulatory document and it's actually going to be ready for public review in the new calendar year.

So Reg Doc 2.9.2 we've been working on for many years. It will be released early in the new year for public consultation and it provides a more consistent framework and it will establish technology-based release limits, so what can your technology do to help keep release limits low?

And it will also look at, of course, at ensuring that human health and the environment is protected. And so it'll ensure that the licensee, you know, should there be a loss of control, that's being captured by that technology base release limit.

So it'll be based on the design of the facilities and those limits will be much lower than what we're seeing right now for DRLs.

MS TILMAN: Could I ask or say something in clarification to what Dr. Lacroix was asking and your response?

THE PRESIDENT: Yes, you may.

MS TILMAN: If you don't mind. I've gone through how DRLs are established and the variables that are used to put it together and one of the variables, besides representative persons, meteorology, exposure pathways, is

something known as Dose Conversion Factors.

And these factors, in the case, for example, of Tritium, are subject to further discussion. A particular nucleotide can be considered a weak nucleotide as, believe it or not, Tritium is because of these Dose Conversion Factors and they have a role to play in the reason why the DRLs of magnitudes of 10 to the 17th. I mean, this DRL that we see for this facility is the same as for Bruce or for the others, for the particular radio nucleotide involved.

So I'm glad to see that there may be some kind of rethinking of this but I really think that it -- the use of it minimizes the impact of the doses that are going on because there's no explanation that I can see as to why there are even the 10 to the 10th or 10 to the 11th Becquerels of Tritium being released on a yearly level.

How is that happening? Sorry. That's it for now.

MS MURTHY: Thank you. May I respond?

THE PRESIDENT: Please.

MS MURTHY: Yes, thank you, Ms Velshi. I would like to call upon our dosimetry specialist, Bert Thériault. Are you online? Please respond if you are available. Otherwise, I'll go with somebody else. Just give me a sec. We're figuring out who's able to --

All right, Kiza, go ahead.

MS SAUVE: Kiza Sauvé. So Kiza Sauvé. He does look at the conversion factors as radio nucleotides move through the body. And this is methodology that's in the CSA Standard N228.1, that is -- that Standard is developed under the CSA group using, you know, nuclear experts across the community.

I'm not sure -- well, I was going to ask someone else to add but I'm not sure if we can add further on that but this is standard methodology that's used. I do hear from Ms Tilman that there are concerns and so maybe we can look at getting a better answer for that.

MS MURTHY: Thank you. And if it is an undertaking that the Commission wishes us to take, then we will do that.

I do want to just underline the fact that the DRL is not an aspirational number. It is used to derive what the release limits for the facility but it's not the number that anyone is shooting for in terms of doses or releases from the site.

THE PRESIDENT: Okay. So, Mr. Gull, I have a question for you. And this is to do with slide 7 of the intervention. And while we recognize that what's in front of us is kind of corresponds to Phase 3, packages A, B, and C, but, as it comes to high level waste and a better

appreciation of what CNL's thinking is behind that, there's a statement here that, once the site is announced, this is by the NWMO schedule for 2023, a decision will be made as to whether to continue interim storage of the fuel at the Douglas Point site or to transfer it to central interim storage at the CRL site.

Help me understand, why would that make a difference for you as to what the ultimate location may be for high level waste?

MR. GULL: Yeah, Mike Gull, for the record. In many respects, it doesn't make any difference to how we act, you know? We are responsible for this waste and we are responsible for the safe keeping and stewardship of this waste, of maintaining it as it needs to be maintained in a safe condition and protect the environment from it for as long as we have it.

I think, you know, in practical terms, you know, I think, again, opinions vary about when an ultimate disposal facility may be available and I think we have a number of, if you like, working assumptions that we use.

But, ultimately, we will maintain safe ownership and stewardship of this waste by doing whatever we need to do to keep it safe while it is within our ownership and, obviously, you know, there's an element to which, if a final disposal solution becomes available and

we know what the time scales are, that that might impact some of our decision making.

But it will always be safe while it's under our control and I don't know whether -- perhaps Shannon Quinn from, sorry, Dr. Quinn from ACL might wish to put a perspective on waste strategy and policy and the impact of, you know, CNL's decision making as impacted by the activities of NWMO.

THE PRESIDENT: Dr. Quinn?

DR. QUINN: Hi, for the record, my name is Shannon Quinn. I'm the Vice-President of Science, Technology and Commercial Oversight for Atomic Energy in Canada Limited.

So maybe I'll just step back a little bit and reinforce the message that all of the waste is the responsibility of ACL. ACL, as a federal Crown corporation and agent of the government of Canada, is the owner of all of the waste that's been discussed throughout these Commission hearings and we are responsible ultimately for the safe discharge of all of those radioactive waste liabilities that are in our ownership.

And so we are looking at the best, most responsible ways for addressing and discharging those liabilities in the interests of the government of Canada and of Canadians.

And so it goes a little bit back to one of the other intervenors that was concerned that the government of Canada has -- is not taking oversight or responsibility for this and this couldn't be further from the truth.

So it is ACL's responsibility to look at the responsible plans for all of this waste and we are moving forward on that and we take that responsibility very seriously.

So when it comes to sort of talking about this specific issue of high level waste and the plans to go forward for it, one of the things that we want to look for is a sort of safe, responsible and practical means of addressing it. And so the way that the NWMO planning process plays into that is that we know that, currently, they have two sites under consideration.

One of those sites is relatively close to the Bruce site and the Douglas Point site and one of them is not. So, in a scenario where, in 2023, it becomes known that the site for the high level waste disposal in Canada will be in relative proximity to the Douglas Point site, then reasonably, we would want that sort of factored into our plans for the high level waste to see what makes sense in that scenario.

And what makes sense might reasonably

change, depending on the location, ultimately, of where the disposal site is. It may not but part of the thinking here is -- and planning is taking into account, you know, what we think the useful life of the current facility is, the current storage is on site and this goes back to some of the other questions, too, that -- where we believe that some of the existing buildings, facilities and storage areas will not last all the way until the 2040s when we expect, in the case of high level waste disposal, to become available and we would have to look at replacing those storage or refurbishing them or otherwise handling the waste. Then you want to start to think about what's most practical.

So it's sort of a long answer to say that, in a scenario where we had to address sort of the current storage locations before ultimate disposal would be ready but we know that disposals in the vicinity, we might choose to address it on site.

In the case where it was going to have to be moved anyway to a location in northern Ontario, it might make sense to move it to existing facilities in the Chalk River region on its way to its ultimate disposal.

THE PRESIDENT: Thank you. Thank you for that. So the current spent fuel canister area, what is the expected life? And I ask because I want to know, in this

proposed licence period, the next ten years or 14 years or whatever is left of it, is there work that is expected to be done in that storage area?

DR. QUINN: Shannon Quinn, for the record. I'll pass it to CNL, who are best placed to speak to the current condition of the facilities.

THE PRESIDENT: Mr. Schruder?

MR. SCHRUDER: Yes, thank you. Kristan Schruder, for the record. The canister design life, it's a 50-year design life. So, around 2035, it'll be getting close to its 50-year design life.

As we have discussed, we do have a life management program in place where we're doing inspections of our canisters to monitor any sort of degradation that may be there and taking action to repair that.

So, as we move forward and as we continue to provide that -- execute that life management program, we'll continue to take actions and reassess the condition of those canisters and take actions as required.

THE PRESIDENT: Okay. Thank you. And so, Ms Tilman, I know you've raised some other issues which some other intervenors have as well so we will save some of those for later on. But I do want to thank you for your intervention and you get the last words on this. So over to you, please.

MS TILMAN: Yes, thank you very much. One quick thing. I want to make sure that the dose for contract workers exposure rate is discussed at some point.

I have something I want to read from Eugene Bourgeois, if you don't mind, if you can allow me that.

We were at a hearing at the WW -- for the WWF in 2017 where the legacy issues of Douglas had come up in some of the monitoring that's done at the Bruce site.

And this is what he said. There's no regulatory limits associated with the concentration of radionuclides in industrial groundwater monitoring wells as the water is not used for drinking purposes. The fact that there are no such regulatory limits does not mean that the levels of Tritium in one of the monitoring holes are acceptable. It was magnitudes higher than others. And this is monitoring for Tritium. To assert that Tritium is unlikely to have a measurable impact on the water quality of Lake Huron without evidence to substantiate the statement is disconcerting.

Even if the water from these wells is not potable, that doesn't mean the water won't flow underground and be connected with groundwater that is used for drinking purpose, and not just for humans.

The water from the aquifer, the Middle

Sand aquifer, empties into Baie du Doré and these are the spawning grounds for both whitefish and smallmouth bass. The Baie du Doré is an important source of food and habitat for these species who, in turn, this becomes an important source for humans.

This is one of his main concerns is the connection of all these issues, it's not just here, located right there at this one.

And I have one final comment I'm afraid to make but, anyway, I hope it addresses it. I call it the final frontier, dare we ask, beam up the waste, Scotty, to a galaxy far, far away, is that our solution? (laughs) So I'll end my presentation with that. Thank you very much for this opportunity and I appreciate your comments.

THE PRESIDENT: Thank you. Thank you for your intervention and sharing that, reminding us of Mr. Bourgeois' comments then. So, with that, we will take a 15-minute break and we will resume at 1125. So we'll see you then.

--- Upon recessing at 11:08 a.m. /

Suspension à 11 h 08

--- Upon resuming at 11:25 a.m. /
Reprise à 11 h 25

THE PRESIDENT: Welcome back, everyone.

We are ready to move to our final oral presentation, which is by the Town of Saugeen Shores, as outlined in CMDs 20-H4.10 and 20-H4.10A.

I see that we have Mayor Luke Charbonneau with us who will be making the submission.

Mayor Charbonneau, over to you.

CMD 20-H4.10/20-H4.10A

Oral presentation by the Town of Saugeen Shores

MAYOR CHARBONNEAU: Thank you very much.

Madam President and Members of the Commission. I guess will they be bringing up my presentation?

--- Pause

THE PRESIDENT: Just give them a couple of seconds to get it going.

MAYOR CHARBONNEAU: Yes. No problem. There it is.

Very good. Well, thank you very much and you can move right to the next slide.

I am Luke Charbonneau and I am the Mayor of the Town of Saugeen Shores and I want to thank you, Commissioners, for this opportunity to speak with you today about CNL's proposed licence amendment and about their plans for continuing with the decommissioning of Douglas Point. I will be speaking to you today from the perspective of a community that has been positively affected by Douglas Point throughout its lifespan and which will continue to be affected throughout the decommissioning process.

Just a little bit briefly about my community. The Town of Saugeen Shores is located immediately north of the town of Kincardine, which you heard from yesterday, and they of course are the host community of Douglas Point. One of my colleagues is also Mitch Twolan, the Warden of Bruce County, who you also heard from yesterday. I hope not to repeat too much of what they said to you yesterday, but some of those things I will reiterate because they are important to my community as well.

So we are the fastest-growing community in the region largely because of the influence of Bruce Nuclear Power development and because of the history with Douglas Point. We are a hub for innovation and a centre of excellence in the global nuclear industry, home to several

of the leading suppliers of Bruce Power and of the nuclear industry in Canada.

And just historically, briefly, Douglas Point has had a tremendous impact on our community. The reason why we have that status is the location where all of these nuclear suppliers want to locate dates right back to Douglas Point. The development of Douglas Point in our region really began and accelerated that movement of our rural community to becoming a place which is going to be central in the future to carbon-neutral energy production in the fight against climate change. We are proud of that legacy and therefore proud of Douglas Point and I certainly want to be very clear about that.

Next slide, please.

So the Town of Saugeen Shores Council has passed a resolution supporting the decommissioning of Douglas Point and we are looking forward to continuing to engage with the proponent and the regulator as you make your way through the decommissioning process over the next several decades.

We do have a few points of interest which we would like to raise with the Commission and with the proponent in hopes that you will address them during part of this process and in the future.

Next slide, please.

So this slide really contains all of those points of interest that the Town of Saugeen Shores has and I will take a few minutes now to go through them.

The first and important item for us, and one which was likely raised by the Town of Kincardine with you, is waste disposal and in particular the non-radioactive components of the facility. We have great confidence in the process that is in place to deal with the radioactive elements, but we do have a particular concern about items that will eventually find their way into local landfill. We are keen to ensure that local landfill capacity is preserved, although it is very likely that materials from Douglas Point will not be making their way into the Town of Saugeen Shores because of provincial regulations preventing that. We have a broader regional interest in ensuring that the Town of Kincardine's landfill capacity is not overly stretched. We have regional agreements which ensure essentially that if one or several municipalities run out of landfill capacity that then regionally we become responsible for landfill and so this does have the potential to impact the Town of Saugeen Shores. All of that is to say that we want to encourage both the proponent and the Commission to ensure that as part of this licence amendment process and as part of future decommissioning that as much material from this

facility as possible is diverted from landfill, either by recycling or other means. We are very keen to see as little of that material end up in local landfill as possible and we are hoping that you will prioritize that.

The second item of interest to us is routes and methods for the transportation of -- well, all material off the site I suppose, but in particular radioactive material, low-, intermediate-, high-level waste which may be making its way from the site to Chalk River or to a future storage facility which may or may not be constructed down the road. We are very keen and want to make it clear that the Town of Saugeen Shores desires to be consulted as those routes and methods are established, particularly if they make their way through our community. We consider it important that any future construction project of this magnitude, involving large amounts of material moving around, just in terms of infrastructure, in terms of traffic, in terms of future planning for the community over several decades, it is important for us that we be part of that planning process, that we be consulted on it and have an opportunity to have input into it.

So the third item, and one of, I think, critical importance, certainly from our perspective and I think regionally here in Bruce County at least and beyond, is the question of hosting agreements. So we have several

processes underway. Obviously, there is a process, as has been referenced earlier today, with the NWMO to locate, to find a site, a suitable solution to store high-level waste, and that will come with its own arrangements. Unfortunately, at this point there is no plan or even potential plan for permanent storage of low- and intermediate-level nuclear waste materials in Ontario and so what that means from my perspective or seems to mean -- and maybe you can correct me -- is that those communities which are currently hosting low- and intermediate-level nuclear waste are essentially permanent storage locations for that material. I mean I guess there are shades of grey there. What does permanency look like? They are likely going to be storing that material for a very long time and I think it's important that from the perspective of the CNSC, from the perspective of the proponent, that work be done to ensure that those communities, potentially the community of Chalk River or other locations, be compensated for providing the long-term storage of waste materials that were produced outside of their communities. I think that should be a fundamental principle in this and I think that the proponent and the Commission should take steps throughout this process to ensure that those hosting agreements are created and signed. We are several years now for any kind of waste moving off that site, which is

good. It gives the proponent and those host communities time to create those hosting agreements and have them in place for when the time comes when they will be receiving waste materials, particularly low- and intermediate-level waste materials from Douglas Point.

So those are the three issues that the Town of Saugeen Shores Council has expressed a view on and I would be keen to hear any comments that either the proponent or the CNSC has to make on those, but I will conclude by just reiterating that the Town of Saugeen Shores by resolution has indicated it is supportive of the decommissioning and the ongoing decommissioning of this facility and the proponent's current licence agreement amendment and so I think it can be said that there is strong community support for CNL and overall what you were trying to do through this application and we are keen to see it move forward with these issues that I have raised on behalf of Council being addressed.

So thank you very much.

THE PRESIDENT: Okay. Thank you, Mayor Charbonneau.

I am not sure whether you joined us yesterday, but your municipal colleagues from Bruce County and the Municipality of Kincardine had certainly raised issues around disposal of non-radioactive waste and

landfill capacity and we spent a fair bit of time discussing that --

MAYOR CHARBONNEAU: Yes.

THE PRESIDENT: -- so we won't go back to that, but we will see what other questions the Commission Members have and we will start with Dr. Demeter.

MEMBER DEMETER: Thank you very much, Mayor, for your presentation and intervention.

You mentioned you are the fastest-growing region in -- the fastest-growing area in your region and with accelerated decommissioning activities you expect more activity. Do you have any concerns or have your constituents expressed any concerns about just general traffic, you know, just road traffic leading to hazards with wildlife or just the risks of travel and traffic?

MAYOR CHARBONNEAU: So you mean in terms of employees who are moving on and off the site to do the decommissioning?

MEMBER DEMETER: Yes. Like commuting traffic, suppliers traffic, truck traffic like related to this industry? Will this increase local traffic in your area and what are the risk perceptions of that?

MAYOR CHARBONNEAU: I think that it will likely increase traffic, but it is important to keep it in context. There is an awful lot of economic activity

already happening at the Bruce site and that is ramping up quickly and so we are already prepared for that and working on it. I think there will need to be ongoing work on our road system to accommodate that and we are preparing for that through transportation master plans, et cetera. So I believe it will be an impact, but it is not one that I am concerned about.

MEMBER DEMETER: Okay. Thank you very much.

THE PRESIDENT: Dr. Berube...?

MEMBER BERUBE: Thank you for your presentation. I have no questions, thanks.

THE PRESIDENT: Dr. Lacroix...?

MEMBER LACROIX: Thank you, Mayor Charbonneau, for this presentation. No, I do not have any questions.

THE PRESIDENT: Okay.

Dr. McKinnon...?

MEMBER McKINNON: Also thank you for the presentation and I have no further questions. Thank you.

THE PRESIDENT: Okay. Thank you.

And, Mayor Charbonneau, you raised some concerns from your community around compensation and agreements. I mean those are outside the purview of the Commission and that is why we are not going there. So with

that, let me turn it over to you with any final comments you would like to make, please.

MAYOR CHARBONNEAU: No. I appreciate very much your time. It is certainly important for me to raise those questions of compensation in whatever forum I can and so I have done that here and I certainly hope that the proponent is listening, but I do appreciate the Commission's time. Thank you.

THE PRESIDENT: Okay. Thank you. Thank you very much for that.

So this concludes the oral presentations by intervenors and we will now move to the written submissions.

Marc, maybe if I can turn it over to you to walk us through the written submissions, please.

MR. LEBLANC: Thank you, Madame la Présidente.

CMD 20-H4.2
Written submission from the
Canadian Nuclear Society

MR. LEBLANC: The first submission is from the Canadian Nuclear Society, as outlined in CMD 20-H4.2.

Any questions from the Commission Members

on this submission?

So I will be looking for raised hands in that regard and wait for five seconds each time. I am not seeing any raised hands.

CMD 20-H4.3.

Written submission from

Laborers' International Union of North America

MR. LEBLANC: So we will proceed to the next submission, which is from the Laborers' International Union of North America, as outlined in CMD 20-H4.3.

So any questions from the Members? I am again looking for raised hands.

And seeing none, I will proceed to the next submission.

CMD 20-H4.8

Written submission from

Ontario Association of Demolition Contractors

MR. LEBLANC: The next submission is from the Ontario Association of Demolition Contractors, as outlined in CMD 20-H4.8.

Any questions from the Members on this

submission?

I don't see any raised hands.

CMD 20-H4.9

Written submission from Ontario Power Generation

MR. LEBLANC: So the next submission is from Ontario Power Generation, as outlined in CMD 20-H4.9.

Any questions from Members?

President Velshi...?

THE PRESIDENT: Maybe a question for Mr. Gull.

Sir, with OPG's Centre for Sustainable Development, what is your role in that?

MR. GULL: Yes. Thank you, Madam President.

I think I would like to pass this one on to Kristan Schruder, who has been actively engaged in discussion on this topic on behalf of CNL.

MR. SCHRUDER: Yes, thank you.

CNL has registered as an industry catalyst with the Centre for Sustainability -- the Centre for Canadian Nuclear Sustainability. I think I have that acronym correct. So we are participating in this new endeavour that OPG has raised and we are looking forward to

participating with the industry to solve some of the challenges. You know, we have had discussions with OPG on some of the challenges. There are some challenges that we face here at CNL that we also may want to consider to bring forward to the industry to look for some of those solutions to help us as we move forward with our decommissioning program at all of our sites.

THE PRESIDENT: Thank you.

CMD 20-H4.12

Written submission from the Saugeen Ojibway Nation

MR. LEBLANC: I will now proceed to the next submission, which is from the Saugeen Ojibway Nation, as outlined in CMD 20-H4.12.

Any questions from the Members on this submission?

So we have Dr. Berube and then Dr. Demeter.

So Dr. Berube, the floor is yours.

MEMBER BERUBE: Yes. I was looking at this submission and it struck me as unusual that the SON has decided not to do an oral presentation. I believe that might be the first time this is the case. To that end I would like to have CNSC discuss basically the activities

that they have undertaken to consult with them at this point and also if CNL could give us some insight as to the activities that have been done on behalf of the SON as well.

MS MURTHY: Kavita Murthy, for the record.

So I will ask Adam Levine from the Policy Aboriginal and International Relations Division to speak to the CNSC's role in engaging with the SON.

MR. LEVINE: Thank you very much. Adam Levine, Team Lead, Indigenous Relations and Participant Funding, for the record.

So over the last couple of years we have been working very closely with the Saugeen Ojibway Nation and their Environment Office and we have developed a long-term engagement terms of reference with them that we signed just over a year ago and we are very proud of that accomplishment.

So as part of that, we have a fairly complex and complete governance structure with them, where there is an advisory committee and steering committee that involves leadership from both the CNSC and the SON. We also have a working group with them and so we have one of the Bruce site Inspection Officers, Jeff Stevenson, who is our single point of contact for the SON, and Kathleen Ryan for the SON, who talk probably weekly I'm guessing and also

meet quarterly as the working groups work through a number of the different topics and issues pertaining to the Bruce site.

So when CNL applied for the licence amendment for Douglas Point, we informed them immediately of that and started incorporating those discussions into our regular meetings with both the SON Environment Office and their leadership and we answered any questions they had. We brought our experts with regard to Douglas Point to those meetings to answer questions and we also made sure that through our REGDOC-3.2.2, Indigenous Engagement, that CNL was doing their part to engage the SON, which they have done very well. So I believe, as evidenced by their intervention and them not wanting to intervene orally that we have done a good job of addressing their concerns with regard to this particular application and we have that mechanism for ongoing discussions with them and their leadership for any items of interest to them. Thank you.

MR. LEBLANC: CNL...? Mr. Schruder...?

MR. SCHRUDER: Yes. Kristan Schruder, for the record.

Before I pass it over to Mitch MacKay to speak to some of the specifics, you know, I do want to point out that we have been engaging with the SON Environment Office for over the last year and we are

committed to continuing to build a meaningful, collaborative relationship between the SON and CNL.

So I will pass it over to Mitch for some of the specifics of our current engagements.

--- Pause

MR. MacKAY: I'm sorry about that. I am unmuted now.

Mitch MacKay, for the record, CNL's Manager of Stakeholder Relations for Environmental Remediation Management.

Yes, as Kristan has pointed out, we have been engaging with the SON Environment Office over the last year and that has taken on both in person meetings and over the phone meetings. We have also toured the SON Environment Office through the Douglas Point site and we have also offered to continue these discussions and reach some sort of longer-term agreement through the life of this project in order to sort of solidify this relationship going forward and to make sure that their engagement in this process is satisfactory to their needs.

MR. LEBLANC: Thank you.

So Dr. Demeter...?

MEMBER DEMETER: Thank you. I quite appreciated the intervention and I thank them for submitting it.

The one question I have is they bring up a very specific observation or concern relative to the importation of invasive plant species and I wanted to ask CNSC if that is a consideration and, if so, how it would be mitigated or what is the risk of depositing invasive plant species during this process?

MS MURTHY: Kavita Murthy, for the record.

I have Mr. Andrew McAllister from the Environmental Risk Assessment Division ready to answer that question.

Please go ahead, Andrew.

MR. McALLISTER: Hi. Andrew McAllister, Director of the Environmental Risk Assessment Division.

Am I appearing in people screen? Okay. I just see Kavita, so I wasn't sure if I was appearing.

So we don't have specific requirements around invasive species. It is something that I would say occurs in the natural environment. We see that not just in this site but in other sites. For example, looking from an aquatic perspective, 10-15 years ago the round goby was just showing up in Lake Ontario and now it is a very common species that we are seeing in some impingement results in some of the Lake Ontario nuclear power plants. Here we would expect, and sort of consistent with an environmental management system, these sorts of opportunities to have

that continuous improvement with respect to facets of a licensee's environmental program, one of which could be to minimize the likelihood of introduction of invasive species through use of native plants and species when doing remediation efforts, for example. And we would be looking at those aspects through our oversight on their environmental management system.

MEMBER DEMETER: Okay. Thank you very much.

MR. LEBLANC: Thank you.

I don't see any other raised hands, so I am just going to wait three seconds. No.

CMD 20-H4.15
Written submission from the
Provincial Building and Construction
Trades Council of Ontario

MR. LEBLANC: So the next submission is from the Provincial Building and Construction Trades Council of Ontario, as outlined in CMD 20-H4.15.

Any questions from the Members?

CMD 20-H4.20

Written submission from Northwatch

MR. LEBLANC: As I see no raised hands I will proceed to the next submission, which is from Northwatch, as outlined in CMD 20-H4.20.

I will just note that Northwatch was also part of a joint submission that was addressed yesterday under the aegis of CELA.

So any questions from the Members on this submission?

President Velshi...?

THE PRESIDENT: Thank you, Marc.

A question for CNL. The intervenors raised a couple of issues that I would like to pursue with you. One is around the status of the fuel storage. I think it is on page 7 of the CMD about, you know, how is the defective fuel managed differently, what is the condition of the structures, the baskets, et cetera. Is this documented in a report that is publicly accessible?

MR. SCHRUDER: Kristan Schruder, for the record.

I am going to ask Ian Bainbridge just to confirm whether this is available on a publicly available document.

MR. BAINBRIDGE: There certainly was a document issued to the public, it was around 1994, that gave details of all of the fuel -- as much as could be made publicly available of all of the fuel that got in there, exactly what the storage arrangements were, and that was certainly distributed widely at the time and we still have copies of that. So that can definitely be distributed. We could give an update to it.

THE PRESIDENT: I'm sorry, that is 26 years ago, so do you think given the current state of storage, do you think it needs a bit of updating and then sharing?

MR. BAINBRIDGE: It is certainly possible we could look at updating that. A great deal of the information won't have changed a great deal, other than perhaps some decay. The condition of the canisters, as I think was mentioned earlier, is very closely monitored under the Life Management Program and on the last CNSC inspection in fact we did have a good look at those canisters to make sure they were in good condition. And we do regularly check the interspace between the actual canisters and the concrete -- sorry, between the actual baskets of fuel and the concrete canisters to satisfy ourselves and everybody else that those canisters are still in very good condition and that the baskets are not leaking

in any way.

But yes, we could look to update that and re-release it. Yes.

THE PRESIDENT: Thank you.

And my next question, perhaps it is for Dr. Quinn at AECL. Again, this kind of follows from the integrated waste strategy that we talked about. The intervenor is, you know, raising what we have heard from many, is CNL's long-term plans, what are the contingency plans if some of these permanent disposal facilities don't materialize as expected and an opportunity to have some public discussion around that. So I'm not sure whether it is CNL or AECL that is best equipped to respond to that.

DR. QUINN: Shannon Quinn, for the record. I am happy to make a start on the question anyways.

So certainly we are very aware of the initiative undertaken by Natural Resources Canada to review its radioactive waste framework as well as the work being undertaken by the NWM0 regarding strategy around an integrated plan. So for us, we are following it very closely and of course no matter the outcomes of those two separate initiatives, we will want to build that into our plan going forward.

In the meantime, AECL is continuing to make progress on our responsibilities to manage and move

forward on the disposition of our radioactive waste liabilities. And so in this regard our plans are continuing while we sort of continue to engage as appropriate with those processes by those other two organizations.

In terms of I guess the plan B aspect of your question, in a scenario for whatever reason our current plans right now specifically around low-level waste are altered in the future, one of the things I would point out, so specific to the Douglas Point scenario, is that the amount of low-level waste that is anticipated through at least those first three planning envelopes is sort of quite small on a relative basis, whereas the amount of low-level waste for which AECL is responsible in the Chalk River region is very significant. It is actually the largest amount of low-level waste in the country.

I think earlier there was a discussion around there is anticipated to be about 1 million cubic metres of low-level waste, 90 percent of which is already at the Chalk site. So we are anticipating that about 5 percent of that only will be occupied by radioactive waste that is AECL's waste that is coming from other facilities that we own, including the Douglas Point facility, and the amount of that 5 percent that represents Douglas Point is very, very, very tiny.

So in the grand scheme of things on a practical level, sort of almost no matter the scenario going forward, consolidating that relatively small amount at the Chalk River site where we are actively managing the much larger volumes we think makes sense almost irrespective of what the scenario is going forward.

THE PRESIDENT: Thank you very much.

MR. LEBLANC: I don't see other raised hands. I had noticed that, Mr. Gull, you had raised your hand, but you lowered it, so I guess the answer was complete and there is no need to complement. So yes?

CMD 20-H4.21

Written submission from Evelyn Gigantes

MR. LEBLANC: So let's proceed to the next submission, which is a submission from Ms Evelyn Gigantes, as outlined in CMD 20-H4.21.

Any questions from the Members on this submission?

Dr. Demeter...?

MEMBER DEMETER: Thank you.

This intervention raised for me a need just to clarify that we are looking at planning envelopes A, B and C in all those activities and I wanted to confirm

that within Chalk River's current licensing they are capable of managing all the waste produced by envelopes A, B and C without a change to their current licence. So are they currently licensed to do all of this within their current boundaries of their licence or will there need to be some adoption?

So I guess from CNL's point of view, that really -- you know, as a shipper of the waste you have to know that the receiver is capable of receiving it and have you confirmed that they are capable of receiving it within their current licence boundaries for A, B and C planning envelopes?

MR. LEBLANC: Mr. Schruder...?

MR. SCHRUDER: Kristan Schruder, for the record.

Yes, I can confirm that our CRL licence does allow us to accept waste from Douglas Point and we do have the capacity to store this waste on an interim basis as long as we are required to.

MR. LEBLANC: And Ms Murthy...?

MS MURTHY: Thank you.

I have Nancy Greencorn who has some -- let me start again.

So in addition to the licensing basis for CRL allowing the waste to be sent from Douglas Point to

CRL, there are requirements for how that waste onsite has to be managed in terms of the storage and security and how on the CRL site it will be managed. So to give a little bit more precision, it isn't as though Douglas Point can pick up and bring the waste. There is a CNSC review of the arrangements that are going to be made onsite. So if you will permit me, I would like Nancy Greencorn to speak to that, please.

MS GREENCORN: Nancy Greencorn, for the record.

As was indicated, CNL needs to notify the CNSC that they would like to move the waste to the Chalk River site and they will have to verify through their safety assessments any intention to add that waste and verify and demonstrate to the CNSC that they still meet the -- there is no overall risks or impacts are not different than already assessed within the safety assessment.

So for low- and intermediate-level waste, CNL has indicated to CNSC staff that they would like to move it and CNSC staff will then do a verification as well to confirm that is within the licensing basis.

However, for the high-level waste, just so we give a full, complete picture, an additional safety assessment would be needed if they wanted to add or

construct any new concrete canisters to hold that waste and, again, ensure that these proposed activities and overall risks and impacts are not different than the -- any greater magnitude than those assessed under the current waste safety assessment. And again, CNSC staff would verify again that is what's in the licensing basis.

MR. LEBLANC: Thank you.

So this concludes the written segment of this hearing, Madame la Présidente.

THE PRESIDENT: Okay. Thank you, Marc.

So then we can move to the final round of questions from Commission Members and we will start with Dr. Berube.

MEMBER BERUBE: Yes. My first question goes to CNSC staff regarding the SCAs that were included in this particular hearing. Particularly, I am looking at management systems and why you chose to basically keep this out, seeing that management of this particular facility going forward is pretty much, in my opinion anyway, paramount to good operations and tending to this. So if you could get into the details on why you thought that that wasn't an important part of this?

MS MURTHY: Kavita Murthy, for the record.

As I indicated earlier in response to the very first intervention, we are not saying that management

system is not important. What we are saying, when we get an application what we look at is are there additional requirements related to management systems that apply given what they want to do in their application. So an assessment of the management system is an ongoing process and that oversight over management system is a continuous activity. So for that site, given that that site is all they have been doing and all they are proposing to do for the next period is management of the waste, we look at their management system processes from that perspective.

I will ask Kevin Ross to add any other details that I may have missed, but the bottom line is that the management system continues to be important and we do look at it. We just don't have any special needs identified given the activities they are going to do.

So Kevin, over to you.

MR. ROSS: Kevin Ross, for the record.

So just because we didn't discuss a particular SCA in the CMD doesn't mean that we haven't assessed CNL's compliance with the requirements for that SCA and the programs under it.

So CNL does have a very mature management system that meets the requirements of CSA N296. We have reviewed that program before and we can confirm that it is acceptable and meets the requirements to do the activities

under this licence condition.

It is also important to note that the activities that are being conducted at Douglas Point are very similar to activities that CNL is already conducting at their other sites where this program has been in place.

THE PRESIDENT: Thank you.

Let's move to Dr. Lacroix.

MEMBER LACROIX: Thank you.

This is a question for staff. I am looking at your presentation, your slide presentation that you made yesterday, and on page 27 -- yes, slide number 27 concerning the Waste Management (3 of 3), you showed us -- you depict a schematic of the preliminary decommissioning plan, which is followed by a detailed decommissioning plan and eventually a planning envelope detailed decommissioning plan.

So from what I gather, the planning envelope of the detailed decommissioning plan is the practical implementation of the detailed decommissioning plan itself. In any engineering project of the size that we are talking about right now, you will have surprises, you will have unexpected events or glitches or, yes, problems that you will have to face that you did not foresee. I was wondering, if you come to these problems, does it mean that you have to go back to the detailed

decommissioning plan and redo it and then come back to the planning envelope or is it a back-and-forth process or you stick to the planning envelope and you adapt it according to the problems and challenges that you are facing?

MS MURTHY: Kavita Murthy, for the record.

As we go down the three boxes --

MEMBER LACROIX: Yes...?

MS MURTHY: -- on this, we are getting closer and closer to precision, to knowing what the licensee is dealing with and how they are addressing it. So can there be surprises? Yes, there can be surprises and the requirement for -- that is why the requirement for the planning envelope DDP to be reviewed and accepted by CNSC staff and when that is accepted, in implementing that if they find further surprises, then they have to go and revise their planning envelope DDP and get that approved.

I will pass this on to Nancy Greencorn, who is the Waste Decommissioning Division Director, and she can provide probably a better response than that.

MS GREENCORN: Nancy Greencorn, for the record.

So I can go into the expectations and the level of detail for the program overviews versus what is expected in the planning envelope DDPs, if you would like, but I think what you are asking is when we expect the

detailed decommissioning plans to be revised.

In REGDOC-2.11.2 on Decommissioning, as well as the CSA standard N294 on Decommissioning, we stipulate that a decommissioning plan needs to be revised every five years or when requested by the CNSC staff. We also indicate that the DDP should also be updated and reviewed in light of any incidents or events relevant to consequences from decommissioning, revised regulatory requirements, operational experiences and lessons learned, and advances in decommissioning technologies. So in addition to the five-year periodic basis, we also provide our expectations within the regulatory documents when the decommissioning plan should be updated.

So to answer your question, if information is learned through the decommissioning process and that impacted the decommissioning, yes, we would expect a revision to the plan.

MEMBER LACROIX: And I just want to make sure, once it is revised by staff, it goes back to the Commission for approval?

MS GREENCORN: Nancy Greencorn, for the record.

Decommissioning plans are reviewed and accepted by CNSC staff.

THE PRESIDENT: Okay. Moving to Dr.

Demeter then.

MEMBER DEMETER: Thank you.

So one of the things I am a bit struggling with is -- and staff can help me figure out what the approach is. So to make a determination for the licence, we have to figure out if they are qualified to carry out the activities and we have to also determine if they make adequate provisions for the protection of the environment and health and safety. What we have been provided with is a lot of the -- like Table 1 which talks about each planning envelope and what will happen in those envelopes. There was access upon request for the detailed decommissioning plan Volume 1, which is an overview, but a lot of the how this will be done will be based on the other detailed decommissioning plans related to each element of the envelope, which we don't have in front of us.

So how do I make a determination that there is adequate provision for the protection of the environment and human health without those envelopes? What information has been presented at this Commission hearing to make that determination, to help me make that determination in the absence of that detailed how they are going to do it?

MS MURTHY: Kavita Murthy, for the record.

So with respect to the activities that are

going to be conducted on the site, we have the program overview DDP and all of the supporting programs and our compliance history with the licensee and their experience and our experience with the types of activities that they are doing that inform our recommendation to you.

With respect to the decommissioning activities specifically, asking the question that you have asked, basically the envelope that we are looking at is do they have the right programs, do they have the processes they need, do they have the expertise.

I will ask Candida Cianci to provide a more detailed response to this question.

MS CIANCI: Candida Cianci, for the record.

I was going to just echo the same as Ms Murthy, is that what we have put before you is staff's assessment of CNL's past performance. We have looked at their corporate-wide programs and we have determined based on a review of those corporate programs, on their performance of implementing those corporate-wide programs, but also looking at whether the programs would cover the proposed decommissioning activities. We have done that assessment and we are confident to say that the activities would be carried out safely and within those programs and that there is no need to change those programs in order to

address these decommissioning activities.

The other thing that I would just say is that we also have that confidence because this approach of planning envelopes coming in later has also been carried out at Chalk River Laboratories and Whiteshell and through compliance verification activities we can say with confidence that that is being carried out safely and, again, within the bounds of those corporate-wide programs.

MEMBER DEMETER: Okay. That does help me. There's some precedent as well that you talked about there.

May I ask a follow-up, Madam President?

THE PRESIDENT: Of course.

MEMBER DEMETER: So in the same guise, this facility has been in storage and surveillance for decades and now we are shifting to a very different operation. And again, from my end, because it is going from storage and surveillance to accelerated decommissioning, I wanted to echo Dr. Berube's comments that I think all the SCAs are really important for us to understand where they sit with this because it is a new operation for them. It is not like it is status quo, so the SCA rating for their storage and surveillance is necessarily transferable to accelerated decommissioning.

But I just want to echo that I think this is a new venture for them, this is an accelerated

decommissioning, and I think all the SCAs and how they rank or will rank based on their new activities is important, as important to understand the big picture. That is more of a comment than a question.

THE PRESIDENT: Thank you, Dr. Demeter.

Dr. Berube, you had a follow-up?

MEMBER BERUBE: I have a couple of questions for CNL.

One of the concerns with this particular hearing has been we are talking about, you know, detail and I think that has been brought to light on a number of occasions, and particularly because we are adding envelope C, accelerating that whole process, reactor-based systems. And knowing about what is on the inside of that reactor building, I can tell you there's pretty much hundreds of systems and tens of thousands of subcomponents in there and all kinds of nasties, depending on the history of the reactor, as you alluded to earlier, Mr. Gull. So can you give me a full scope?

Right now my understanding is you are going to go into the reactor building, you are going to tear out just about everything down to the bioshield. I would assume that would include fuelling machines, all the pumping networks. Does that include all the header networks, does it include all the scaffolding, all the

catwalks? I mean give me a scope of how deep you are going to go into this thing. Where are you going to leave that for the next stage of this? Because really there isn't a lot of clarity for me in what I have been given.

THE PRESIDENT: Mr. Gull.

MR. GULL: Yes. Mike Gull, for the record.

Before I hand over to Kristan Schruder for the kind of details that are required to answer that question, I think I would just like to kind of reinforce a point that I think the staff made in one of their earlier answers, is that ultimately we have a hierarchy of controls in place through the programs which allow us to develop the work scopes and the work activity plans which are put together at a very, very, very much more detailed level in terms of what we are going to do, how we are going to do it, you know, potentially minute by minute or step by step through days, not over periods of weeks or months. So I think in terms of the how and exactly what we do, you know, this is why it is appropriate to rely on the programs that effectively allow us to have appropriate control arrangements and to make sure that our work is properly planned, just consider all the options and techniques that are available, just consider ALARA in relation to the task in hand and just come up with a very, very, very detailed

execution plan for each scope of work.

So I think that is probably just a reflection partly on the previous question and I would like to hand it over to Kristan now to answer the specifics of the points of detail of the scope of Phase 3.

MR. SCHRUDER: Yes. Thanks, Mr. Gull.

I just want to go back to one point, that this is new for Douglas Point. So although it is true that, you know, we are transitioning from a storage with surveillance into a decommissioning licence so that we can advance with Phase 3 decommissioning, you know, our decommissioning team has been doing this type of activity for the last 10 years, even longer at the Chalk River site, as well as other decommissioning teams within CNL at the Whiteshell Laboratories. So we have been removing contaminated system structures and components similar to what we will be doing within Douglas Point safely and compliantly at our other facilities.

Specifically with planning envelope C, as Mr. Gull pointed out earlier, we will take a staged approach as we systematically move through the reactor building. You know, we start with removing some of the -- what we call the low-hanging fruit, you know, some of the systems that are in the way to access other systems.

Prior to removing any systems, we will get

into our characterization to verify any hazards and any hazards that need to be mitigated so that we can do that dose assessment that we can talk about, the ALARA assessment, to ensure that the method that we are using to remove that piece of equipment or piping or tank is done safely. We will be removing everything out of the reactor building, with the exception of the bioshield and the calandria. So we will not be removing that. You know, under planning envelope C, we would remove the redundant fuel handling system that is not integral to the calandria and would not be used to disassemble or segment the calandria in the future.

There may be systems that we leave within the building because it will be safer to remove that when we are doing the final demolition of the reactor building. For instance, there is a large cooling tank at the top of the building, an emergency cooling tank that is now empty. It will be safer to remove that at the end during the final phase E as opposed to doing that through planning envelope C. So depending on the system and where it is located and if it is clean, you know, radioactively clean or needs to be removed prior to demolition, some of the systems may stay for the final demolition of the building.

I hope that answers your question. If there are more specifics than that, please let me know.

MEMBER BERUBE: Just a couple of more specifics on that. I mean historically, under a normal operation obviously the building itself would be under negative pressure. I would assume that that is not the case anymore in storage and surveillance mode. So is everything coming out through the air locks or do you physically have to breach the building itself as part of the decommissioning process in envelope C or what is your intention here?

MR. SCHRUDER: Kristan Schruder, for the record.

I will ask Ian Bainbridge to speak to some of the specific activities that you have just mentioned.

MR. BAINBRIDGE: Yes. Ian Bainbridge, for the record.

Right now the current operation of the reactor building is that unless we are doing operations of any form in there, the door is closed and the ventilation system is turned off. When we make preparations to go in there, we turn the ventilation fan on and open the door. It is a single door now, not a double door airlock. So we do keep it when we are in there under a -- perhaps not a negative pressure, but there is a definite airflow into the reactor and then out through HEPA filters. So that is the current arrangement and that is the one we expect to carry

on with.

As for removing the wastes, right now the expectation is that we will size reduce everything to go out of the airlock door. We are still looking at the precise way of dealing with this calandria. You know, we are coming up with ideas of how could we do this, along with all the other calandrias that AECL owns, and we are going to come up with a holistic approach to dealing with these calandrias.

Initial look suggests, yes, they can be size reduced to go through those doors. One of the options we are looking at and we need to discuss with all the other stakeholders, et cetera, before we decide upon that final plan is could we put a new opening in the side of the reactor building and export it in as a large unit. There are certainly issues with that approach, but they are not insurmountable, so we will look at that. But right now our basic planning for envelope C at least is to take it out of the reactor building door that we currently have.

MEMBER BERUBE: And just one final question for Mr. Gull, if you could, sir.

Just looking at envelope C in particular because that is of concern to the Commission, what do you see as the greatest challenge in executing that particular envelope until closure?

MR. GULL: I mean personally I stand with a view that the team has got the experience to manage that work. You know, the major challenges that we have in all the work are actually related to, you know, hazard materials and industrial worker safety as we dismantle and demolish things and not necessarily kind of dose. So I think, you know, for us it is getting the right contractors in place to execute the scope and the right level of supervision and just methodologically sticking to our, you know, toolkits of working through developing the data, work plans and executing them in line with our arrangements. So technically I am very confident that we can do what we need to do and I am really sure the team can manage what it needs to do.

THE PRESIDENT: Okay. Well, let's move then on to Dr. McKinnon.

Thank you for that.

MEMBER McKINNON: Yes, thank you.

I have a question, a general question for CNSC staff. It is about how the adequacy of assessments is carried out and in particular for waste characterization.

So in the CMD staff mentioned that through desktop reviews of documents that adequate characterization was taking place in advance of decommissioning activities. I know that there is always a difference between a plan on

paper and a plan being executed in the field. So how can you determine just on the basis of desktop studies that the characterization program suits the nature of the materials being characterized and that there will be no ambiguities?

So it is a general question about how reliable you think your determinations or assessments from desktop studies are and how do you decide when they are adequate versus a site inspection?

MS MURTHY: Kavita Murthy, for the record.

So we do rely on the assessments, the characterization that CNL does and there is a review of that internally. There are also inspections and also reports that CNL has to submit post-decommissioning. So Nancy Greencorn and maybe Kevin Ross following that can provide some precision.

MS GREENCORN: Nancy Greencorn, for the record.

So as we have discussed, as part of the DDPs we expect to see comprehensive characterization results to be able to review the decommissioning plans. The characterization can be done at a facility at different stages and I think CNL spoke to this yesterday.

Characterization can be done early through storage with surveillance periods and the purpose of that characterization may be more primarily to protect the

workers for the activities they are doing. That may support subsequent waste characterization later on.

But oftentimes when characterization is done in early decommissioning times, it looks at protecting the worker and then we look at the type of characterization that would be provided subsequently for looking at the waste receiver's requirements, so the characterization that would be done for ensuring that it meets the waste acceptance criteria for the waste receiver. Some of that characterization is done in preparation with the decommissioning plans, but some of that characterization is done iteratively through the decommissioning process as well.

So CNSC staff review the characterization and the type of information and the objectives of the characterization that was being done and we review that and see if it is adequate for the purpose of that characterization. We then complement that often with onsite inspections for the characterization as the waste is being generated as well. So the desktop reviews that take place, we talk about it, may be done up front in its scoping surveys and different analysis was done, but then we participate in inspections where we review the waste characterization data that was provided and oversee some of the characterization activities as they progress. This is

typically what we do at many operational decommissioning and waste management facilities and if you would like specific examples of inspections we have done, I can ask my colleague Kevin to answer that.

But essentially, depending on the purpose and the objective of the characterization, we determine if a desktop is adequate or whether we need to go into the field for those characterizations.

MEMBER McKINNON: That's very good. Thank you.

MS MURTHY: Dr. McKinnon, if I may, Ramzi Jammal would like to close off this question. Thank you.

MR. JAMMAL: Thank you, Kavita.

Madam Velshi, Members of the Commission, I would like to reiterate what Nancy said and I will put the emphasis on waste management.

The characterization of waste has always been taking place in Canada. It doesn't matter if it is refurbishment activity, the proper characterization has to take place and proper packaging and management of the waste will take place. So the waste is produced from many activities, let it be from a byproduct of isotope production for medical purposes or decommissioning. I just want to reassure the Commission and the public that we call it a desktop assessment or an assessment. Our philosophy

is, again, the licensee is responsible for all activities, we assess the completion of the information and we present it to you based on the completion of the information, supplemented by ongoing regulatory oversight. That is site inspections. But the characterization of the waste is verified at both levels, at the time of being packaged to be transported, and then at the facility that is going to receive that waste, CNL, then they have to reevaluate -- not just reevaluate, confirm that the waste packaging meets the requirement as it was packaged.

I just do not want to leave the fact that waste management is ongoing as we speak in Canada, regardless of how it is produced, decommissioning or not. I fully accept the phases before you as we progress towards the future, but the characterization of the waste is ongoing at all times in Canada and our review is assessed based on the documentation submitted, supplemented by inspections. And we are coming before you in a few weeks on nuclear power plant ROR to include waste management. Thank you.

THE PRESIDENT: Thank you, Mr. Jammal.

I have a question -- well, I will start with CNSC staff and then ask CNL to comment, and it is around the term of the licence. So, staff, in the Environmental Protection Report, the rationale you have

provided for why you are recommending a 10-year term is, and I will quote:

> "While the overall risk of the site remains low, this change merits considering a shorter licence period." (as read)

And I am a little puzzled by that, because at the end of the licence term in 2030, the site goes back to storage and surveillance, right? I mean the phases D and E are not contemplated until much later than 2030 and we don't know, I mean it says "to be determined". So what is this change that drives this shorter licence period? Can you help give me -- help me understand your rationale, please.

MS MURTHY: Kavita Murthy, for the record.

When we look at the span of activities and the time period that the licensee -- that this amendment request comprised, the activities are going to be completed at that point in time. There will be -- the three envelopes will be done. So bringing it to that point to say that beyond this there is going to be storage with surveillance seems to line up with the schedule of activities that the licensee has provided us.

There is also the standardization of licence, which there is a 10-year licence term which we have used, and for this

particular licence the 14 years would basically have gone three years beyond what they wanted to do -- four years beyond what they wanted to do with the proposed activities.

So the rationale really was related to the fact that this type of activity, the schedule they have provided and the work they are going to do will be completed at that point in time and then they will come up for renewal. So that is a good point for us to say how are they doing and report to the Commission going forward for the next period.

I am waiting to see if Kevin is ready to provide any other information.

Kevin, please go ahead.

MR. ROSS: Kevin Ross, for the record.

I just will confirm what Kavita Murthy has already stated, that CNSC staff's recommendation is to align the licence period with proposed activities, which are planning envelopes A, B and C, and that a 10-year licence period is commensurate with what we would typically be issuing for decommissioning sites such as this.

THE PRESIDENT: So maybe I will ask CNL. How confident are you in your 10-year estimate and if you needed more time -- I mean just look at what has happened this year and who knows what can happen in a 10-year period -- and if you needed more time, then you would have

to come for renewal for this additional scope? I'm just trying to understand from your perspective what is the risk of a 10-year licence term versus the existing 14-year term.

MR. GULL: Mike Gull, for the record. I am going to start out before handing across to Mr. Schruder.

I think from our perspective a couple of things to consider here. I mean I think personally I am quite confident that 10 years is a really reasonable amount of time to perform the scope that we have laid down in the first three phases. I think the second point is, you know, we are a business which continues just to strive to be open and I'm sure, as you have talked a lot in this hearing about learning, that the next 10 years will give us an awful lot of learning. It may well be that the current kind of schedules and phases that we have for phases D and E are something we would wish to think about based on not just the 20 years learning we have now but the 10 years that follow it.

So while I mean obviously it would be unfortunate on everyone's time if we ended up needing an extension on the scope, I personally think that is a manageable and acceptable risk. But I do think, you know, in another 10 years there will be a lot more to talk about and a lot more confidence about the Canadian DND program in

general. So I don't think we have any difficulties with a 10-year schedule.

I will pass across to the actual licence holder to say whether there is a risk I may have missed there in terms of the schedule or another point you wish to make.

MR. SCHRUDER: Kristan Schruder, for the record.

Thank you. I don't believe there is anything further from a risk standpoint that I would add to what Mr. Gull said. I will just reemphasize that we would have more information and potentially have some of the characterization data from the calandria and be able to speak a little bit more about our future plans and timelines for planning envelopes D and E in a 10-year timeframe. So I think that is the only thing I would add to what Mr. Gull said.

MS MURTHY: So, Ms Velshi, just if you --

THE PRESIDENT: Yes. So before I turn to you, because I was going to come back to you, it is really coming to licence term is independent of our regulatory oversight. That would continue regardless and, you know, the decision had already been made actually to give them a 20-year licence at one point, so I just wanted to understand. After the 10 years actually the risk level is

going to be even lower than what is being proposed at the moment. So we just need to make sure we understand what the rationale is.

I understand the 10 years to make it consistent with other licences. You know, what I am hearing from CNL is, well, in 10 years time we may have additional information and greater clarity around our longer-term plans for D and E. Well, that can happen any time during a licence period and they could come forward and say, you know, we are ready to move or change or whatever.

So over to you, Ms Murthy.

MS MURTHY: Thank you. And I apologize for the interruption.

I wanted to pass this on to Ramzi Jammal because I believe he has something he would like to say.

THE PRESIDENT: Thank you.

MR. JAMMAL: Thank you, Kavita.

Madam Velshi, I fully agree with you that a licence term has nothing to do with regulatory oversight, it is ongoing regardless of a licence for three years, 10 years or indeterminate.

The key point here we are trying to -- we had that internal debate, it was very transparent and there was nothing to hide at all with respect to the licensing

term or amending the existing licence.

We came to the conclusion as the 10-year licence we are -- in the absence of what we do for nuclear power plants, periodic safety review on a 10-year cycle, we want to implement the lessons learned because our philosophy and belief is that we are always learning as we go along from the processes. So in other words, we tried to -- in the absence of a PSR, we wanted to gain information associated with the licence and the activity associated with the licence.

On a separate term, I am fully with you, Madam Velshi, and I fully agree with the fact that the licence term is just a fictional time period on a binding piece of paper, if I may say, but the key point here is the ongoing lessons learned and then trying to match it with respect to the lessons learned in the absence of a periodic safety review. So since this is becoming probably the norm with respect to legacy issues, we take a lot of lessons learned and match it with the environmental reviews, and so on and so forth.

So in principle, you are correct, bang on with respect to licence term. Because when we did the international benchmarking we are the only regulator in the world that regulates such activity with a term, the same thing we apply for nuclear power plant installations. But

the 10 years, we wanted to look at the periodic safety review associated with this licence and to look at the safety case and its validation and, as we always said, we take OPEX internally and externally and we apply them against the licence. Thank you.

THE PRESIDENT: Thank you, Mr. Jammal.

Commission Members, do any of you have any additional questions? I will give you 10 seconds.

Okay. I see no -- oh, there is.

MR. LEBLANC: Perhaps Dr. Lacroix.

MEMBER LACROIX: Yes, I do have a question. It is a snap question concerning CMD 20-H4 submitted by CNSC. On page 30 concerning --with respect to financial guarantees, are the provisions in the 2015 letter still valid today?

MS MURTHY: Kavita Murthy, for the record.

Yes, they are. We have received an updated letter from CNL -- sorry, from AECL, which was received by CNSC on August 25, 2020. So it has been reaffirmed and we have a new letter that reaffirms essentially, but it is updated.

MEMBER LACROIX: Okay. Thank you. This is what I wanted to check. Thank you very much.

THE PRESIDENT: Okay. Thank you.

Well, so before concluding the hearing, I

will turn the floor to CNL and see if you have any final remarks you would like to make.

Mr. Gull...?

MR. GULL: Yes. Thank you, Madam -- Mike Gull, for the record.

Thank you, Madam President and Members of the Commission for considering this application to amend the licence for the Douglas Point Waste Facility.

I would also like to thank the intervenors who took the time and effort to participate in the public hearing, which ensures our accountability to Canadians.

For myself and my colleagues who are here today representing CNL, it is vital that we serve as good stewards of Canada's nuclear legacy liabilities and responsible neighbours in our communities.

As we have discussed this week, CNL maintains a strong record on environmental protection and waste management and of course worker safety. Just as our environmental protection program, waste management program and safety practices are continually improving, we recognize that our public engagement and our relationships with indigenous peoples must do so as well.

It is only through listening and working with members of the public and indigenous communities like those who have participated in this hearing that we can

achieve a shared understanding of what successful decommissioning looks like with respect to worker and public safety, as well as clearing of the site. After all, what we do and how we do it matters most to those who have a stake in what happens to the lands and the water that are affected by this project.

What we heard over the course of this hearing is a concern for indigenous and Métis rights, the environment and the safe execution of the work. In particular, a number of interventions have focused on the importance of protecting the environment. As I have said before, the entire purpose of our work here is to improve the environment so our generation leaves behind a cleaner Canada in terms of nuclear waste liabilities.

We ensure monitoring is undertaken in accordance with our regulatory requirements and our impact to the environment remains minimal.

We are also looking forward to working with local indigenous communities in this area. It has been pointed out during this hearing that indigenous peoples have a particular connection to the land and waters.

I also want to emphasize by moving forward with this work today we are reducing the risk to the environment right now. This is the responsibile thing to

do in terms of worker safety. At CNL presently we have a staff of extensive decommissioning expertise at sites across Canada, from Port Hope, Whiteshell Laboratories and other parts of the country. Our skilled workforce is equipped with the know-how and experience to undertake this kind of job.

Our record at Douglas Point in particular demonstrates this. We shared in our Commission Member Document and our presentation within the current licence period since 2014 we are permitted to do hazard reduction activities that included removal of 22 shipments of low-level waste and 13 shipments of intermediate-level waste. This was all performed with zero work-related lost time injuries or illness and the highest dose to worker was .43 mSv, well below the maximum allowable annual dose for a nuclear energy worker, which is 50 mSv. In comparison, during the proposed licence period we anticipate 20 shipments of low-level waste and one shipment of intermediate-level waste.

As this example shows, we regularly update our safety programs and our team has consistently demonstrated an unwavering commitment to safe work. Through training, observations and communication we have developed a robust safety culture. Going forward we are planning to continue our progress with implementing

internal lessons learned from across CNL, as well as external best practices from our industry and others to ensure we are continuously learning and enhancing worker safety.

I would like to conclude my remarks by discussing our commitment to the local public and indigenous communities. At CNL we are fully committed to meaningful engagement with the indigenous communities whose traditional lands we operate on. With respect to the decommissioning of Douglas Point, the SON, the HSM and the MNO are interested in ensuring that any work that is carried out at Douglas Point involves indigenous people. We share that interest with these communities. While we are in the early days of building relationships with each community, it is a critical component of this project and we continue to take action to grow these relationships to ensure that we incorporate indigenous perspectives into our planning.

With all three indigenous communities we have explored what their involvement might look like and our next steps are to look at this in a more fulsome and concrete way. Our plan enables us to plan for the future as we proceed, learning from indigenous communities and the local communities.

Once again, CNL demonstrates an absolute

commitment to safety and protecting the people and the environment. Since 2014 we have continued to improve our good performance and we are ready to move forward to the final stage of decommissioning the Douglas Point Waste Facility. Building upon this strong record we are well positioned to continue to meet our regulatory obligations into the future with an amended licence.

We look forward to the Commission's decision on our application and thank you for your time.

I will now turn the microphone to Kristan, who will share some final comments.

Kristan...?

MR. SCHRUDER: Thank you, Mr. Gull.

Kristan Schruder, for the record.

I would like to reiterate one key point to the Commission. It is important to emphasize CNL's strong safety performance, past performance. We have safely managed and maintained the Douglas Point Waste Facility for more than three decades. Our track record shows the prioritization of our environmental protection and worker safety.

And I stress, as Mr. Gull did, our commitment to building our engagement and involvement of the public and indigenous communities as we look forward to final decommissioning and remediation of the site.

Specifically, CNL will continue to work with our local municipalities on waste estimates and volumes and ensure disposition routes are available and confirmed.

Ultimately, decommissioning the Douglas Point Waste Facility will reduce and eliminate impact to the environment, the earth and protect the future. This is our mission here. We plan to safely and securely achieve this by moving forward with the three initial planning envelopes through an amended licensing period. It is the strength of our safety and environmental protection programs and the experience and dedication of our employees that serve as the foundation of CNL as the licensee and we are fully confident that the site will progress towards remediation under this licence period.

I will now turn it back over to Mr. Gull.

MR. GULL: Yes. Thank you, Kristan.

I would just like to close with some personal comments.

Some of these interventions have been personally impactful. You can hear and feel the values and passion of the people in their words. Everything we do in the nuclear industry is based upon learning and improving and about making the world a better place through our contributions to clean energy and health, but we also fully

recognize the need to manage our legacy.

The people that came before us at CNL had the very best of intentions in carrying out their work and they did their best in managing the waste. Since then we have learned and we are improving. It is our intention to bring that knowledge to bear in the decommissioning of Douglas Point. At the same time we recognize that Western knowledge and science does not always explain things to people who see the world in a fundamentally different way. We strive to understand these perspectives and uphold our commitment to indigenous and Métis communities and to the public to build trust and to make changes to the site that are understood by all and appear positive from all perspectives.

Thank you.

THE PRESIDENT: Thank you, Mr. Gull. Thank you to your colleagues at CNL. Thank you, CNSC staff, and a special thank you to all the intervenors, all of you for your participation.

Marc, over to you for any closing remarks on this hearing, please.

MR. LEBLANC: Thank you very much, Madame la Présidente.

So before closing the hearing I would also like to thank Ms Ali and Mr. Kim from Environment and

Climate Change Canada as well as Dr. Quinn from AECL for having taken the time to attend this hearing and assist the Commission with the questions.

Also, I would be remiss if I did not thank all the technical, webcast, transcript, interpreters and Secretariat staff who have done fabulously well with this initial virtual public hearing and all the adjustments that needed to be made.

So with respect to this matter, it is proposed that the Commission confer with regards to the information that it has considered and then determine if further information is needed or if the Commission is ready to proceed with a decision and the Commission will advise accordingly.

Thank you.

--- Whereupon the hearing adjourned at 12:48 p.m. /
L'audience est ajournée à 12 h 48