Canadian Nuclear Safety Commission

Commission canadienne de sûreté nucléaire

Public meeting

Réunion publique

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

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

Commission Members present

Commissaires présents

Dr. Michael Binder
Dr. Moyra McDill
Mr. Dan Tolgyesi
Ms. Rumina Velshi
Dr. Ronald Barriault
Mr. André Harvey

M. Michael Binder
Mme Moyra McDill
M. Dan Tolgyesi
Mme Rumina Velshi
M. Ronald Barriault
M. André Harvey

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Secrétaire:

Mr. Marc Leblanc

M. Marc Leblanc

Senior General Counsel:

Avocat général principal :

Mr. Jacques Lavoie

M. Jacques Lavoie

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Ottawa, Ontario

--- Upon commencing at 9:06 p.m./

La réunion commence à 9h06.

Opening Remarks

M. LEBLANC: Bonjour, mesdames et messieurs. Bienvenue à la continuation de la réunion publique de la Commission canadienne de sûreté nucléaire.

We have simultaneous translation. We would ask you to keep the pace of speech relatively slow so that the translators have a chance to keep up.

Des appareils de traduction sont disponibles à la réception. La version française est au poste 3 and the English version is on channel 2.

Well, usually it’s channel 2 for French and channel 1 for English, I don’t know what’s the change today, just check it out if you need the translation devices.

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

I’d like to note that this proceeding is being video webcasted live and that archives of these

proceedings will be available on our website for a three-month period after the closure of the proceedings.

We would ask you to please silence your cell phones and other electronic devices.

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

President Binder.

LE PRÉSIDENT: Merci, Marc.

And I would like to greet everybody good morning and welcome to the continuation of the meeting of the Canadian Nuclear Safety Commission.

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

Je vous souhaite la bienvenue and welcome to all those joining us via webcast.

I'd like to begin by introducing the Members of the Commission that are with us here today. On my right is Moyra McDill and Monsieur Dan Tolgyesi; my left are Ms. Rumina Velshi, Dr. Ronald Barriault and Monsieur André Harvey.

We have heard from our Secretary, Monsieur Marc Leblanc, and we also have with us, Monsieur Jacques Lavoie, Senior General Counsel to the Commission.

MR. LEBLANC: The *Nuclear Safety and*

Control Act authorizes the Commission to hold meetings for the conduct of its affairs.

The Agenda was approved yesterday so please refer to Agenda 13-M11.A for the complete list of items to be presented today.

I'd also like to take this opportunity to correct the record. In the context of the public meeting that took place yesterday afternoon, there was a mention by CNSC staff that CCNB Action was going to hold a press conference on the topic of NB Power's preliminary findings of site-specific seismic hazards assessment. To correct the record, please note that CCNB Action did not hold a press conference yesterday.

Thank you. Mr. President.

5.2 Presentation on a Proposed Approach to Conduct an Environmental Protection Assessment Process under the *Nuclear Safety and Control Act* And an Environmental Assessment Process under the *Canadian Environmental Assessment Act, 2012*

THE CHAIRMAN: Okay, so the first item on the Agenda is the presentation on a proposed approach to conduct an environmental protection assessment process under the *Nuclear Safety and Control Act* and an environmental assessment process under the *Canadian Environmental Assessment Act*. This is outlined in CMD 13-M8.

And I'll turn the floor now to Dr. Patsy Thompson to make this presentation.

13-M8
Oral presentation by
CNSC staff

DR. THOMPSON: Bonjour, monsieur le président, mesdames et messieurs les commissaires, mon nom est Patsy Thompson. Je suis la directrice générale de la Direction de l'évaluation et de la protection radiologiques et environnementales.

With me today are Mr. Brian Torrie, the Director of the Environmental Assessment Division; Mr. Michael Rinker, the Director of the Environmental Risk Assessment Division; Mr. Lee Casterton, an Environmental Assessment Officer. And I'm also joined by Mr. Peter Elder, the Director General of the Directorate of Nuclear

Cycle and Facilities Regulation, as well as Dr. Greg Rzentkowski, the Director General of the Directorate of Power Reactor Regulation.

The purpose of today's presentation is to inform the Commission of recent changes to the *Canadian Environmental Assessment Act* and CNSC's proposed approach to conducting environmental assessments under the *Canadian Environmental Assessment Act, 2012*.

We will also describe and propose an environmental protection assessment process under the *Nuclear Safety and Control Act* and as outlined in CMD 13-M8, we are also seeking the Commission's endorsement and direction to develop and implement the revised approach to conducting environmental assessments under CEAA 2012 to develop and implement the new environmental protection assessments or EPA process under the *Nuclear Safety and Control Act* and to develop a regulatory document detailing the EA NEPA processes.

I will now ask Mr. Brian Torrie to continue with the presentation.

MR. TORRIE: Good morning. I'm Brian Torrie, the Director of the Environmental Assessment Division here at the CNSC

Before discussing the changes to the *CEAA Act* and the proposed Environmental Protection Assessment

process or EPA process, I'd like to provide some background information on environmental assessment and protection at the CNSC.

Before the *Nuclear Safety and Control Act*, or *NSCA*, came into force in 2000, the basis for environmental assessment and protection for the Atomic Energy Control Board, or AECB, was provided mainly under the *Canadian Environmental Assessment Act*.

Under this Act, proclaimed in 1992, the AECB completed four panel reviews, three for Saskatchewan mines: Cigar Lake, Midwest and McArthur; and one for the decommissioning of Tailings facilities near Elliot Lake Ontario.

These review panels were established by the Ministry of Environment and made their recommendations to the Governor in Council or Cabinet. AECB provided technical support to the panel and completed the licensing process following the decision of the federal and provincial governments where appropriate.

With the creation of the CNSC under the *NSCA* in 2000, the Commission was given a clear mandate for the protection of human health and safety and the environment. At that time, the Environmental Risk Assessment, or ERA, tool was implemented to close the gap between the environmental assessment framework provided

under the *CEAA Act* and the more comprehensive environmental protection measures of the *NSCA*.

With the coming into force of the *NSCA*, environmental risk assessments were conducted for all class 1 nuclear facilities that had never undergone an EA under the *CEAA Act*. This was done to ensure that licensees were meeting their obligation to protect the environment and human health. The CNSC was the first regulator -- first nuclear regulator in the world to use a comprehensive environmental risk assessment framework.

Also since 2000, CNSC has completed 66 EAs under the *CEAA Act* and has continued a robust program of environmental protection under the *NSCA* for all its licensed facilities.

The most recent changes to the *CEAA Act*, it will be discussed in more details in this presentation, support responsible resource development and recognize CNSC's robust environmental protection regulatory framework. Environmental assessment and protection continues to be a priority.

While the CNSC has sought to continue to improve its environmental protection framework the *NSCA* and regulations remain the cornerstone by providing numerous requirements related to environmental protection.

This includes requirements for:

environmental baseline characteristics of the site and the surrounding area; description of releases of nuclear substances and hazardous substances to the environment; the proposed measures to control releases of nuclear substances and hazardous substances into the environment; the proposed measures to prevent or mitigate the effects; an information program to inform persons living in the vicinity of anticipated effects on the environment and the health and safety of persons; environmental protection policies and programs affluent in environmental monitoring programs and any other information needed to ensure the protection of the environment in health and safety.

This last requirement gives the Commission the ability to effectively and efficiently scope the technical information required to fulfill its environmental protection mandate.

As mentioned earlier, shortly after the NSCA came into force, CNSC required the use of the environmental risk assessment framework to complete assessments pursuant to the *NSCA* and the *CEAA Act*.

More recently, the Canadian Standards Association Standards, or CSA Standards, have been developed in cooperation with industry and the provinces to provide further clarity on CNSC environmental protection requirements from assessment of risks to the

environment and human health to monitoring of emissions and of the environment.

NSCA requirements have been documented in key policy guides and CSA Standards listed on this slide. P223, the regulatory policy on the protection of the environment developed in 2001, provides the general principles for environmental protection and makes commitments to consistency with *Canadian Environmental Policies Acts and Regulations*.

Developed in 2006, SG296, Environmental Protection Policies Programs and Procedures, at Class 1 nuclear facilities and uranium mines and mills provide specific direction related to environmental management systems. It is aligned with ISO 14001, Environmental Management System.

CSA Standards N288.4 and N288.5 form the basis for the design implementation and review of environmental monitoring and effluent monitoring program. CSA Standard 288.6 specifically requires that uranium mines and mills and Class 1 facilities conduct an environmental risk assessment on a periodic basis, every five years, and update that environmental risk assessment when the facility is changed in such a way that the licensing basis is altered.

Together these CNSC regulatory documents

and CSA Standards provide clear information on what is required to demonstrate the environmental protection requirements of the *NSCA* and its regulations have been met.

The licensing basis as defined in the CNSC Info-doc 0795 published in 2010; it sets the boundary conditions for acceptable performance that regulate the facility or activity and that establishes the basis for CNSC's compliance program and respect of that regulated facility or activity.

In terms of environment protection, the licensing basis is defined, in part, by the information contained within the environmental risk assessment conducted for each facility. This point is important -- is an important consideration for the EPA process discussed later in this presentation.

The CNSC has a well-established record of environmental protection and assessment that has been strengthened over the last 13 years. The changes to the *CEAA Act* in 2012 will not diminish this strong performance or impede further enhancement to NCSC's environmental protection and assessment program.

Moving forward, as will be discussed in the rest of this presentation, the proposed EPA will formalize practices for determining the scope of public

participation and aboriginal consultation for all significant licensing activities that do not trigger an environmental assessment under the new *CEAA Act* 2012. In addition, public participation opportunities will be enhanced through our own participant funding program and growing outreach program.

Aboriginal consultation obligations will also be met. As before, CNSC will encourage proponents to engage communities as early as possible in the development of their project proposals. CNSC staff will continue to identify groups and inform communities about the Commission process early in the development of any proposal and throughout the life of the facility.

In the near future, we also expect further strengthening of the CNSC environmental protection framework. Memoranda of Understanding, like the one currently under development with the Department of Fisheries and Oceans, will provide further efficiencies and effectiveness by relying more appropriately on CNSC technical analysis to inform decision-makers. The technical and scientific expertise of CNSC's environmental specialists is recognized across Canada and abroad.

The next few slides of this presentation describe the key changes to the *CEAA Act* and CNSC's approach to implementing these changes. The new Act came

into force on July 6, 2012.

In summary the key purpose of the change were: 1) to clarify responsibilities by reducing the number of EA decision makers by providing CNSC with decision-making authority on all nuclear project EAs; 2) to reduce duplication by revising the provision for substitution and delegation; 3) focus EAs on major projects that have the potential for significant effects; 4) ensure mandatory public participation for all EAs; and 5) promote communication and cooperation with aboriginal peoples by specifically recognizing them more clearly within the *CEAA Act*.

This slide will now detail the changes within the *CEAA Act*. Under the old Act, the contributor determined if an EA was required involved various steps including the licensing application, determining if the proposal met the *CEAA Act* definitions of a project or activity then consideration of the appropriate level of assessment through regulations.

Screenings were generally for smaller projects, comprehensive studies for larger projects and then panel reviews for major projects with public concern or potential for significant environmental impacts.

The level of assessment also had different requirements for public consultation and factors to be

considered. Each level also had a different EA decision-maker; it was the Commission for screenings; the Minister of Environment for comprehensive studies; and the Governor in Council or Cabinet for panel reviews.

However, no matter what the level of review, the CNSC applied the same rigor of technical review to every EA under the *CEAA Act* and the Commission made its independent decision on the licence.

A regulation for designated projects, a project list that focusses only on major projects, has replaced this old triggering system. Now an EA under *CEAA* will be required for any project on that list. The list is expected to be revised again later this year following public review but for now the former comprehensive *CEAA* list has been adopted.

With this new approach instead of multiple levels of assessments there is only one level of assessment for nuclear project, and it is the Commission that determines the scope of public participation and additional factors to be considered.

The Act requires public participation in an EA report and decision, but does not specify the nature of the public participation. Under the new Act, other federal authorities, such as Fisheries and Oceans Canada, still have expertise and permitting powers, so their

participation, as was done in the past, will have to be coordinated with CNSC's decision-making.

CEAA Act 2012 also changed the EA factors to be considered. The revised Act focuses more closely on areas of federal jurisdiction, such as fish. In addition, the list of factors to be considered has been made clear by making all factors mandatory, and requirements for consideration of project need and impact on renewable resources.

Even with these changes, the CNSC, with its broad mandate for environmental protection, will continue to scope its environmental reviews to include all elements needed to ensure a full and robust assessment.

The assessment in turn will be used under the licensing and compliance process to ensure that mitigation measures are implemented and effective in protecting the environment and human health.

Public participation is now required for all federal EAs, but has always been done for all CNSC EAs. So this is not a significant change for the Commission. As was noted earlier, the CNSC approach to Aboriginal consultation has not changed.

We also continue to be engaged as early as possible and participant funding will be available to add further value to the process.

The revised Act strengthened the provisions for delegation and substitution as well. Substitution is not allowed for CNSC EAs, since CNSC has federal jurisdictions for nuclear matters. However, delegation allows the CNSC to delegate all aspects of the EA process, except decision-making to another jurisdiction.

The CNSC already has expertise and experience in working cooperatively with the Province of Saskatchewan on all our EAs, to reduce duplication and overlap in public consultation and EA requirements.

We also have recent an experience in Nunavut providing technical support to another EA process by ensuring the product undergoes a rigorous technical review prior to any licensing decision.

Finally, timelines have also been introduced in the revised Act but they do not apply to the CNSC EAs. However, CNSC has chosen to adopt the *CEAA Act* requirement to have all EAs completed within 24 months of federal time.

This timeline is relying on Proponents ensuring their information is submitted in a timely and complete manner. In the past, CNSC has consistently met this timeline for EAs, while working with our federal partners and the major project management office to develop a coordinated work plan to resolve any outstanding

issues.

As has been noted throughout this presentation, the CNSC has a solid foundation of environmental protection and assessment under the *CEAA Act* and the NSCA. We are well-prepared to work under the revised *CEAA Act*. The Commission already has been the decision-maker for about 90 per cent of its EAs.

The key changes resulting from the *CEAA Act* are already in place at the CNSC. This includes public participation on all EAs, work plans with assigned time lines, consideration of all environmental factors, early and comprehensive Aboriginal engagement, and clear decision-making based on sound technical scientific review.

Although the *CEAA Act* provides CNSC greater flexibility to conduct EAs, CNSC's proposed approach to conduct EAs under the revised Act is similar to the process that was adopted under the previous *CEAA Act*. While the *CEAA Act 2012* did not establish a timeline requirement for CNSC's EAs, amendments to the Class 1 nuclear facility regulations and to the uranium mines and mill regulations that came into force, and included 24-month timelines for regulatory reviews and licensing.

Consistent with the CEAA agency, CNSC staff are proposing to adopt the 24-month timeline as the

maximum timeline for CNSC led EAs. As outlined in the regulations, the proposed timelines apply to CNSC activities only, and do not account for time periods required for steps outside of CNSC's control, such as time required by the Applicant to gather information for the licence application and/or EA review, or to cooperate with another jurisdiction.

The nature and scope of the project, technical complexity, and potential environmental effects, are used to determine the amount of time required by staff to complete key milestones, such as drafting EA guidelines and EA reports as well as the amount of time required to conduct a technical review of Proponent EA submissions.

The exact amount of time to complete each milestone will be outlined in an EA work plan to ensure transparent and predictable process.

EA timelines and the associated EA work plans are also impacted by the timing and level of Aboriginal and public participation. CNSC staff are proposing a criteria-based approach that is broadly based on Aboriginal and public interest, the potential for environmental effects, and other relevant criteria, such as the other jurisdictions involved.

In other jurisdictions, Aboriginal and a public participation process may directly impact the

conduct of the EA. The specific criteria in their application are discussed in the next slides.

EA may identify a number of mitigation measures and follow-up monitoring activities that are required for a project to be carried out. The CNSC licensing process is used to ensure implementation of mitigation measures, and the development and implementation of all follow-up monitoring programs.

The CNSC compliance process is used to confirm the implementation of mitigation measures and to verify their effectiveness. If mitigation measures are found not to be effective in protecting the environment, or unforeseen environmental effects are identified, the CNSC has the authority to require the implementation of additional mitigation measures. This process if often referred to as “Adaptive Management.”

CNSC staff propose a criteria-based approach to determine the specific timing and length of Aboriginal and public participation opportunities during the EA process. Staff can assess each criteria on a scale corresponding to a numerical value, and also include written rationale to support the determination.

To complete this evaluation, CNSC staff consider the project description submitted by the licensee, previous EAs and licensing actions concerning

similar activities or locations, including comments received and interventions during previous hearings.

For example, the existing or likely public interest criteria was determined high in the recent Darlington refurbishment EA, based on a consideration of the type of project and the project location. The potential or perceived adverse affects were also determined to be high in light of the Fukushima event, at the time when the determination was made, and previous concerns raised regarding fish impingement and entrainment.

To continue with the same example, existing knowledge of the site and familiarity with technology and mitigation measures, were determined to be well-understood, given that OPG has met CNSC expectations in environmental performance, and CNSC staff are familiar with refurbishment activities at other Canadian nuclear power plants.

CNSC staff may also consider relevant additional factors that have potential impact on the level of public participation, such as other jurisdictions involved.

The final conclusions and the corresponding Aboriginal and public participation opportunities will be discussed in the next slide.

To determine Aboriginal and public participation, staff would complete a determination at the beginning of the EA process, based on the criteria outlined on the previous slide. Potential participation opportunities could include, but are not limited to the following: A review of the EA guidelines; a review of the proponent's technical submissions, such as the environmental impact statement; a review of the EA report; and/or open houses or other outreach.

This criteria-based approach will ensure CNSC staff are able to take into consideration all potential factors to appropriately determine the need for and level of public participation. Public review periods can then be conducted for a length of time that it is reasonable for the public to review all information.

The involvement of other jurisdictions is also considered, as other jurisdictions may have their own public participation processes, or opportunities, which should be considered by CNSC staff.

The public participation determination is included in the EA guidelines for decision by the Commission, and are reflected in the EA work plan. As the *Canadian Environmental Assessment Act* and the NSCA do not specify the decision-making process for EAs, the type of hearing conducted is at the discretion of the Commission,

but it is recommended that all EA reports under the *CEAA Act* be reviewed in a public hearing, with a licensing review where possible.

This slide highlights the key steps and timelines for *CEAA Act 2012* EAs at the CNSC. A complete list can be found in Appendix B.1 of the CMD 13-MA, but it should be noted there are no significant changes from our current practice for EAs under the former *CEAA Act*.

The first step is the licence application review period of 60 days. It is during this time, or even before, that some of the EA work can begin. For example, identifying whether the proposed project is on the CEAA project list, any federal, territorial, provincial coordinations, consideration in identification of Aboriginal groups and public concern. By the end of the 60-day review period, EA determination can be formally made for the complete application. Depending on the involvement of other jurisdictions as considered during the licence review period, there may be a requirement to coordinate federal, territorial or provincial partners.

This could take up to 30 days. Within five days, this is followed by the Aboriginal and public participation determination that also received -- receives consideration during the earlier licence application review period.

The next major step is a draft EA guidelines with an option based on public participation determination to go out for public review and comment. The final version is then submitted to the Commission for approval.

The proponent is then required to submit their Environmental Impact statement to the CNSC. The completeness of this submission will be important in ensuring the whole process is completed in a timely manner. Depending on the complexity of the proposal, the technical review can be up to 180 days of CNSC time.

For example, the Darlington new build EA technical review was established at 180 days, but lasted 390 days due to the proponent's time to complete additional information requests from the Panel.

Following completion of the technical review, staff draft EA report and issue it for external review, just as they did for comprehensive studies under the old Act. Once again, the time to draft this report and issue it for public review will vary based on the products' technical complexity and public interest. Following the external review period, EA report -- the EA report is provided to the Commission for a hearing and subsequent decision.

It should be noted that the Commission has

the powers under the NSCA to alter the review process while still meeting the *CEAA Act* requirements. For example, a Panel of the Commission could be established to focus on a particular EA and licensing application and this Panel could alter the process described above in accordance with the CNSC *rules and procedures regulation*.

Similar to other federal review panels, a Panel of the Commission may decide to be directly involved in the information requests made to proponents during the technical review. The *CEAA Act* and the *NSCA* allow this flexibility.

The Environmental Protection Assessment or EPA process is intended for some projects that do not trigger an EA under the *CEAA Act 2012*. An EPA may be required where the scope of a proposed project or activity goes beyond the environmental licensing basis for a facility and there is a potential for significant environmental impacts or public concern.

The EPA process is proposed to formalize the early engagement of the public, Aboriginal groups, the stakeholders in the CNSC licensing process well in advance of a public hearing which can help inform the overall assessment. CNSC staff are proposing that the EPA process be fully integrated with licensing process as the requirements of the NSC and its regulations form the

scientific basis of an EPA. Furthermore, the results of the EPA process would be considered in the same hearing as the licensing application.

Most of the information to satisfy the requirements of an EPA can be obtained by completing or updating a site specific environmental risk assessment.

As was explained earlier in this presentation, an environmental risk assessment also supports the requirements of the *NSCA* and its regulations. Consequently, the EPA process does not result in any increase in regulatory burden.

The CNSC has flexibility to require additional information that is normally outside the scope of the environmental risk assessment, but is submitted by the proponent in accordance with the *NSCA* and its regulations such as cumulative effects.

Flexibility is also provided in determining Aboriginal and public involvement. Staff are proposing a criteria-based approach similar to that presented for an EA to determine appropriate Aboriginal and public participation opportunities. For example, staff could conduct additional outreach or engagement opportunities as appropriate.

The CNSC has always ensured duty to consult requirements have been met before the consideration of a

licence application. This will be maintained and potentially strengthened by the conduct of an EPA integrated with the CNSC licensing process. The EPA process provides and encourages additional opportunities for Aboriginal participation and identification of potential treaty or rights infringements.

In terms of the EPA key steps and timelines, once the EPA process is triggered, the conduct of the EPA will be integrated into the CNSC licensing process as a deliverable for the licensing CMD. Upon receipt of a licence application, CNSC staff will complete an EPA determination. This determination process will be discussed in the next slide.

The EPA determination also serves to inform the Aboriginal and public participation determination. Potential participation opportunities include review of the EPA report or review of the technical EPA submissions similar to an EIS review. Notices of public -- notices of participation opportunities will be posted on the CNSC website and circulated to CNSC's subscription list. These opportunities will be provided in addition to consultation during the licensing process.

Unlike the major project reviews under the *CEAA Act*, no formal guidelines are being proposed as the EPA process relies on existing tools and process. CNSC

staff will direct the proponent to collect the necessary information to support their application and demonstrate to the Commission that there is no unreasonable risk to the environment and human health and safety caused by the project.

As noted earlier, the EPA process will generally rely on the proponent updating their environmental risk assessment based on CSA standard N288.6 to meet the requirements of the *NSCA* and its regulations.

Following completion of the technical review, CNSC staff will prepare a concise report to be included with the licensing CMD informing the public and the Commission of any potential environmental effects of a project describing the mitigation measures to be implemented and identifying monitoring requirements integrated into the licensing's affluent or environmental monitoring program and/or licensing conditions.

No decision will be rendered on the EPA report as the information is intended to support the Commission's regulatory decision under Sub-section 24-4b of the *NSCA*. As the EPA is integrated with the CNSC licensing process, the 24-month regulated timelines previously discussed are applicable to all EA processes.

Focusing now on the process to reach the final EPA determination, this flow chart shows how a

licence application would be reviewed. Beginning with a licence submission, the first step is to determine if the *CEAA Act* applies, specifically, if the project is on -- if the proposed project is on the project list, then an EA under the *CEAA Act* is required with the Commission as the sole responsible authority.

The process would then follow the steps described earlier in the presentation. However if the proposal is not on the project list, then an EPA determination is required.

The first step will be determining if there has been a change in the licensing basis. In particular, if the boundary conditions for acceptable environmental performance have changed, then a revised environmental risk assessment would be necessary and an EPA would likely be required. Where there is a previous EA, an EA under another jurisdiction such as Saskatchewan or an updated environmental risk assessment, it's likely that no -- no EPA would be required. An EPA would not be required where there are -- where the changes are simply administrative amendments or minor changes to a facility.

The final EPA determination step further considers potential environmental effects and public interest criteria to determine the need for an EPA. In some cases where the proposals are small facility

additions with little or no operational changes, there would be no EPA requirement. However EPAs will most likely be required for larger projects such as facility expansions and power plant refurbishments.

As noted earlier, where an EPA is required, it would be fully integrated into the licensing process with the same requirements for an updated environmental risk assessment, but with no -- but with additional opportunities for public participation and Aboriginal consultation.

This slide gives you a few examples of EPA and *CEAA Act* type projects. The *CEAA Act* EAs will focus on major projects similar to those on the previous comprehensive study list such as new power plants, new mines and new processing facilities. The EPA process will focus on smaller projects such as power plant refurbishments and significant facility expansions or activities.

I will now turn the presentation over to Dr. Thompson to conclude. Thank you.

DR. THOMPSON: Thank you.

As highlighted in our presentation, CNSC has a long history of environmental protection and assessment and the facilities we regulate effectively protect the environment and human health.

This experience makes us well prepared to implement the *CEAA Act 2012* and EPA process. In fact, there will be no change in the rigour of our technical reviews and with these two processes in place, there would be no gaps in environmental assessments of nuclear facilities and activities.

The proposed EPA process would be an improvement to our current practices. It enhances transparency and openness by facilitating earlier involvement and more predictable consultation of Aboriginal groups and members of the public.

In conclusion, CNSC staff recommend that the Commission endorse the proposed processes for the *CEAA Act 2012* and EPA and to direct CNSC staff to develop and implement the revised approach to conducting environmental assessments under the *CEAA Act 2012* to develop and implement the EPA process under the *NSCA*, as well as to develop a regulatory document to detail the EA and EPA processes described today.

This concludes staff's presentation and we're available to answer your questions.

THE CHAIRMAN: Thank you.

Okay, let's start the questioning -- the question period with Monsieur Tolgyesi.

MEMBRE TOLGYESI: Merci, monsieur le

président.

On page 11, we are talking about integrated environmental assessment and licensing process. And you rightly say that there is a need for early determination of whatever or not an integrated process applies to the project.

Will staff elaborate criteria to establish if integrated process applies or not, or it's clear from legislation?

DR. THOMPSON: Patsy Thompson, for the record.

The legislation does not specify the process by which the Commission would conduct an environmental assessment as we had presented to the Commission previously and the process that is currently in place.

Because there are so much similarity in terms of the requirements under the *CEAA Act 2012* -- or the *CEAA Act* in the past and the *NSCA*, staff saw it as a good practice to integrate the technical reviews and essentially make sure that the process meets both the licensing needs and the *CEAA Act* needs.

Our experience with the integration is that for many Proponents this is possible as they're able to provide to the CNSC technical documents that meet the

requirements of both licensing and the environmental assessment.

There have been some occasions where the Proponents or Applicants have come forward and have asked that the CNSC complete the environmental assessment but were not prepared to move forward with licensing. So in those cases, the processes weren't integrated. So it's really at the discretion of the Applicant as to how the process would -- would unfold.

But what we're proposing to the Commission and what we have in place currently is a process that allows for integration if that's what the Proponent wishes.

And I'll ask if my licensing colleagues would like to add.

MR. ELDER: Peter Elder, for the record.

Just to say -- so I think when we get to the regulatory document on this one, we will describe what would be required if the Proponent wanted to integrate. Because really to do integration, they have to be able to provide all the information for the environmental assessment and all the licensing information in the same timeframe.

So I think it's a -- you have to have that early discussion but that discussion also has to conclude

-- include the Proponent and then you can make the decision and develop timelines based on those discussions as well.

DR. THOMPSON: Patsy Thompson.

If I could add recent examples, Mr. Tolgyesi, of the integrated process was the -- the environmental assessment that was conducted for the Darlington refurbishment.

OPG came forward requesting integration of the EA with the licensing of the waste facility. amendments that were required for them to move forward.

The Darlington new build review panel was also an integrated process where the panel heard and received information for the licence application to prepare site as well as for the environmental assessment.

And OPG’s DGR project has been conducted in the same manner; with the licence application for site preparation and construction being considered at the same time as the EA review.

MEMBER TOLGYESI: You know, I’m thinking about the new projects where -- the new ones where an environmental assessment and after licensing, you know, and if for any reason environmental assessment is -- doesn’t go through, it’s not accepted, how far the Proponent will -- will continue his licensing process

also? Because I think it will be -- maybe for these they will -- two processes, one is environmental assessment, another one is -- other one is licensing.

DR. THOMPSON: Patsy Thompson, for the record.

I'll start responding to your question and then I'll ask if Mr. Elder has anything to add.

In terms of the -- an example where a Proponent has come forward and requested that the EA only be considered at this time is AREVA's Kiggavik Project where only the environmental assessment is being conducted at this time and AREVA wants the option, when they are ready to move forward with the licence application, to be able to do so with the EA being done.

The -- a positive environmental assessment decision is required before the Commission can issue a decision on the licence.

And so our experience is with the -- when the environmental assessment is being conducted, the technical review being done and the information requests being sent to the Proponent is that as the mitigation measures and the characteristics of the proposed facility become described and in order to be able to conduct the environmental assessment, a lot of the issues that might impede a licensing decision are also being addressed

during the EA process.

And so normally if an EA is successful, in terms of having mitigation measures and no significantly environmental effects, the obligation is under the *NSCA* for environmental protection would be met.

But I'll ask Mr. Elder to add to the information.

MR. ELDER: Peter Elder, for the record.

Just to add two points. I think this is why we've said there are some flexibility on the Proponent's side whether they wanted to integrate or not.

And we've seen it in cases where -- we'll use Kiggavik example, we don't know -- I mean there are a number of factors about the viability of the project but certainly going into a new area where they made a conscious decision to do the EA first.

We've seen integrated processes more where it's established so there's a project going forward in Millennium, which is a new mine in Saskatchewan that Cameco is doing and that will -- is on schedule to be fully integrated.

What these changes in *CEAA* allow is that the Commission is the final decision-maker on the environmental assessment and the licensing. So they can make those decisions in the proper order but you can make

them at this one hearing process, you don't have to refer anything to another body. So you can -- there are efficiencies by putting it together and then you get one decision or a set of decisions after one hearing process.

MEMBER TOLGYESI: So you consider that the majority, what's majority of a project will be integrated, so there is no -- am I right?

DR. THOMPSON: Patsy Thompson, for the record.

I would say that the vast majority of projects could be integrated but the ultimate decision is with the Proponent or the Applicant.

MEMBER TOLGYESI: Because my question will be, what's -- what's the impact, you know, if we have to do two processes -- it's CNSC who will do that, what's the impact on resources and the staff? Do you need -- it will generate some more work?

DR. THOMPSON: Patsy Thompson, for the record.

We had experience before the Commission accepted staff's proposal for an integrated process -- that was around 2009-2010. The EAs that were being done prior to that were not integrated with licensing.

And essentially what happened was the Applicant, the Proponent would submit all the

documentation to support an EA. The EA technical reviews, the Commission's process for consideration of the EA would be conducted; that would take several months, sometimes more than two years. And once the Commission had made an EA decision then the Applicants submitted their licence application.

Sometimes their licence application came before the Commission decision. But it lengthened the process considerably. What we've seen since the integrated process has been accepted by the Commission is significant time saving while the -- the quality of the technical review has remained the same.

THE CHAIRMAN: Just -- just to zero in on where the saving is, I thought that the saving is in the number of public hearings, formal public hearings.

So if you -- if you want to do it sequentially, will the Proponent actually say "Look, do the EA with the public hearing. Then if it's a go, then there's going to be a licensing. And normally the licensing will also have a public hearing."

So you know -- so that's really two -- almost two independent processes that may deal where -- where if for example if it ever happens that we don't agree with the -- the province does an EA and we don't agree with it, or something along that line.

So I can -- I'm just trying to understand. Do you see a proposal where the proponent actually would want two separate independent processes before they decide to go into their licensing?

DR. THOMPSON: Patsy Thompson, for the record.

Our experience is that Proponents who have wanted separate processes have been Proponents that are not ready to move with actual development of their project.

They -- they want the EA done as a planning, and want economic conditions or whatever their considerations are, they're ready to move forward.

The case of AREVA's Kiggavik project is -- is similar to that where they want to be able to have the EA done. And when economic situation and other factors are more appropriate for -- for AREVA then they would come forward with a licence application.

THE CHAIRMAN: But done -- by done you mean do the technical study and the -- and the public consultation? And then there will be another public hearing on the licensing.

DR. THOMPSON: Patsy Thompson, for the record.

That's correct. There would be -- right

now there is a -- an EA going on in the Nunavut for the Kiggavik project. CNSC staff is providing technical support.

If AREVA decides to move forward with the licence application, they would submit their licence application to the Commission. And we would do the normal licensing -- full licensing process including hearings.

THE CHAIRMAN: The Strateco project was like that; was it not?

In a -- in a different multi-jurisdiction way; there was a public hearing for an environmental assessment and then was a public hearing on the licensing.

DR. THOMPSON: That's correct.

Patsy Thompson.

It -- it is correct. The -- the two separate processes for -- for the Matoush Strateco's project.

THE CHAIRMAN: Thank you.

Monsieur Harvey?

MEMBRE HARVEY: Merci, monsieur le président.

Pour ce qui est des timelines on the 11 -- Slide 11, you can read:

> "Timelines are determined by nature's scope of the project, technical

complexity, potential environmental effects during discussions involved."

And will the timeline be determined right at the beginning of the project?

What I want -- would you be able to right at the beginning to say to the Proponent that the -- the guidelines will be submitted to the Proponent at a fixed date?

Because we see that it can vary because it's between zero and 30 days, 15 and 45 days. Would you -- would you be able right at the beginning to say this is the timeline for that project?

DR. THOMPSON: I'll ask Brian Torrie to -- to respond to your question.

MR. TORRIE: Brian Torrie, for the record.

The objective at the beginning of the process is to establish a work plan with the timelines so that you have an established timeline so you know when the -- when the EA is going to end or the review is going to end.

The objective or the reason why there's ranges is you want -- you may want to vary the amount of days depending on the complexity or the public interest of that project.

But there's also got to be some leeway to

adjust a timeline in the future. So for example initially we may decide that there's not enough public interest that we don't need to do a -- some kind of external review on the guidelines say. But then public interest may emerge and then we would decide to do that review that would add a few days.

But generally from the start, the objective is to establish a confirmed timeline for the length of that review.

MEMBER HARVEY: And there is no limit for the submission of the environmental impact statement?

I mean the Proponent can do it and then wait. But can he wait for years and years? Or is there some ---

MR. TORRIE: Brian Torrie, for the record.

Initially when we're -- when we're working on the work plan, we're going to consult with the Proponent to get an idea of when they're going to submit their -- when they could submit their impact statement or their revised ERA on the case of EPA.

So we're -- we're trying to work that into the work plan. We have had situations in the past where we have issued guidelines. And it's been years without any submission. And under the *CEAA* process, there wasn't really a mechanism through to -- to terminate the process.

But now that the Commission's the sole responsible authority, we could establish some kind of guideline for the length of time that you'd have to submit your report.

MEMBER HARVEY: So when he -- he comes back, there's a technical review and where is the -- there's no consultation public hearing after that?

After the -- I'm just looking on Slide 14. You've got technical review, draft, external review. Submit -- where is the -- there is a hearing after the -- there is -- there's not only an hearing on the -- on the guidelines?

MR. TORRIE: Yeah. Yeah. It's possible that you could have a -- you could have a public hearing on the guidelines. And then we'd -- then there'd be -- possibly you could have the public involved in the technical review or the review of the IS.

And then -- and then the public would be involved again at the public hearing where the -- the EA report's being considered.

So there is an opportunity after the technical review for the public to be involved during review of the EA report and the public hearing.

MEMBER HARVEY: Where is it in the timetable there? That's in the external review?

DR. THOMPSON: Monsieur Harvey, those details are better reflected in the appendix that is attached to -- so Appendix B.1. Essentially Slide 14 highlighted some elements of the -- of the appendix. And so the appendix provides more details in terms of -- holding the -- the Commission hearing process and external review period where ---

MEMBER HARVEY: Okay.

Okay, I find it there.

It's okay.

Thank you.

THE CHAIRMAN: So I -- that's -- that's what I understand. You know, we had a long debate about whether we should consult on the guidelines, okay. I see that you're still leaving that as an option under the new *CEAA*, as an option. But I see NA under the EPA, okay.

So you don't anticipate consultation -- formal consultation on the guideline under the EPA?

DR. THOMPSON: Patsy Thompson, for the record.

Under the EPA, the intent is to not develop guidelines.

The CSA N288.6 standard contains the details of the -- the expectations to conduct an ERA. And we would use a project description as the -- the mechanism

for -- for letting people know of that project.

THE CHAIRMAN: But that's maybe useful to indicate in the process. Right now it says not applicable. It's -- it's not as clear as if you're going to rely on existing standards. You know, it would be a lot more useful on this.

But on the -- why couldn't you use the same kind of standard for the *CEAA* for the guidelines?

MR. TORRIE: Brian Torrie, for the record.

We could, in fact, under the *CEAA* process have a situation where –- I'd say it's a project where we already have a lot of experience or a mind, for example, that we already -– we've already had what -- reviewed these guidelines on numerous other projects where we wouldn't need a public review, we'd just issue the guidelines based on our previous experience.

That's all up to the discretion of the Commission because there's no legislative requirement to even have those guidelines or have a public review of them.

THE CHAIRMAN: But again, details here are important. I didn't think that for the guideline phase you'll even go to the Commission.

MR. TORRIE: Brian Torrie, for the record.

The Commission has to endorse the

guidelines for the scope of the project ---

THE CHAIRMAN: So at that time ---

MR. TORRIE: --- and also ---

THE CHAIRMAN: --- at that time, it'll be decided whether they're concerned in it or not?

MR. TORRIE: Yeah. Well I think initially we want to establish that when we establish the work plan as approved -– the public participation plan, as a part of that review of the guidelines.

In the past, often what we did on the *CEAA* screenings was we had an abridged hearing for consideration of guidelines.

THE CHAIRMAN: Okay. Thank you.

Monsieur Harvey?

MEMBRE HARVEY: Une autre question. Comme ça je peux la poser en français parce que c'est au Québec.

Si il y a un projet au Québec -- projet de mines ou quoi que ce soit, et qui est soumis au Bureau d'audiences publiques sur l'environnement, et que donc, il va avoir -- ça va passer par le Ministère de l'environnement qui va exiger une étude d'impact et tout ça.

Comment va s'intégrer la procédure québécoise et la procédure de la Commission?

DR. THOMPSON: Patsy Thompson.

Ce qui -- l'expérience qu'on a pour des projets qui étaient assujettis au BAPE dans le passé comme l'expansion des aires de stockage, de déchets radioactifs à Gentilly-2, c'est que on a collaboré avec le BAPE et avec le personnel du Ministère de l'environnement à ce moment-là qui est maintenant le MDDEFP mais -- donc, la collaboration est en place.

Ce qui s'était passé à ce moment-là, c'est qu'il y avait des exigences en fonction de la Loi canadienne d'évaluation environnementale, le projet était assujetti au processus du BAPE. Le personnel de la Commission a participé aux audiences du BAPE comme experts techniques.

Et lorsque le BAPE a émis ses recommandations, c'est au ministre. Du côté de la Commission, la Commission avait pris une décision sur l'évaluation environnementale, à ce moment-là, des aires de stockage et la réfection.

Et suite à la décision sur l'évaluation environnementale, on avait continué à collaborer avec le Ministère de l'environnement pour s'assurer que les conditions qui avaient été identifiées par le ministre suite au BAPE et les conditions -- les mesures d'atténuation, de programmes de suivi qui avaient été identifiés par la Commission, on a collaboré pour

développer ces programmes-là pour rencontrer les exigences du ministère et les nôtres.

MEMBRE HARVEY: Oui. Je suis assez familier avec ça. J'étais même là à l'époque.

Et il y avait -- à l'époque, il y avait un membre de la Commission du BAPE qui était nommé par la Commission fédérale. Est-ce que -- parce que la Commission ne tiendra pas d'audiences publiques supplémentaires si le Québec en a -- s'il y a eu des audiences publiques du BAPE, est-ce que la Commission va tenir d'autres audiences publiques?

DR. THOMPSON: Patsy Thompson.

Ce qu'on avait fait à ce moment-là, on avait tenu des audiences publiques parce que la portée de l'évaluation environnementale qui avait été faite pour le BAPE était limitée aux aires de stockage des déchets et la réfection de la centrale n'est pas de juridiction -- la centrale n'était pas de juridiction provinciale donc notre évaluation environnementale avait mis l'accent sur la réfection.

Donc, il y avait eu une audience publique de la Commission sur -- mais dans un cas où la portée serait la même, on recommanderait ce qui -- ce qu'on recommande aujourd'hui. C'est de prendre en considération le processus public du BAP comme rencontrant les exigences

de la Commission.

MEMBRE HARVEY: O.k. Un peu comme par le passé dans le fond.

DR. THOMPSON: Oui.

MEMBRE HARVEY: Merci.

LE PRÉSIDENT: Monsieur Tolgyesi?

MEMBRE TOLGYESI: Qu'est-ce qui arrive si vous vous mettez pas d'accord?

DR. THOMPSON: Patsy Thompson.

Je dirais que dans le pire des cas, il y a deux processus. Mais l'expérience qu'on a, à date, c'est que les relations sont bien établies entre le ministère au niveau des bureaux régionaux où on a une bonne collaboration au niveau des programmes de conformité, par exemple, mais on a aussi une bonne collaboration avec les sections du ministère qui sont plus responsables de l'évaluation environnementale et de réglementation des installations.

Donc, c'est pas quelque chose qu'on envisage, mais le pire des cas, c'est qu'il y aurait deux processus séparés.

LE PRÉSIDENT: Mais le processus pour les sciences, c'est à nous. Alors, si on n'est pas d'accord, le projet ne se réalise pas. C'est clair.

Okay.

Dr. Barriault?

MEMBER BARRIAULT: Thank you, Mr. Chairman.

All my questions have been answered so thank you ever so much for your presentation. Appreciate it. Thank you.

THE CHAIRMAN: Dr. McDill?

MEMBER McDILL: I have a few questions. Thank you.

At the top of the flow chart –- I guess it's slide –- sorry, I've changed pages here –- Slide 17.

At the very top, there's an EA determination and there's a project list. And the list includes, for example, new mines and mills, nuclear power plants, nuclear facilities and then there are major expansions to existing facilities.

And that -– at the top, overlaps in the very bottom under major facility expansions. So how on the very top line do you make the decision whether something is on or not on the project list when it actually could be in both parts?

DR. THOMPSON: Patsy Thompson.

It's probably lack of clarity in the language we've used. Currently the project list includes the old comprehensive list with the major expansions being defined as 35 per cent expansion. And -– but the project

list is being revised and will be issued for public review by the ---

MEMBER McDILL: I think that's something that needs to be, sort of, front and centre for the public so they know where it falls.

DR. THOMPSON: What is major major?

MEMBER McDILL: What is -– yeah, yeah, yeah. Big "M" Major as opposed to little "m" major. That was my first question.

THE CHAIRMAN: Just to add a little bit of colour. It will be crystal clear once cabinet approve the project list.

So right now we're in the middle of between the new yet to be approved and the old which is approved.

MEMBER HARVEY: Who is working on that list?

THE CHAIRMAN: CEAA that's the Canadian Environmental Assessment Agency. No, they have to go to cabinet, it's ---

MR. TORRIE: Brian Torrie.

Yeah, the status of the list right now is it's expected to go to Canada Gazette one at the end of March and it's the Ministry of Environment that issues the list out for consultation and is responsible for that regulation under the *CEAA Act*.

And part of that process is a consultation internally within government before it goes public. So we've had input into the list and how it might look, but until it has a public review and then the Minister makes the final decision probably later in July, we won't know exactly what's on the list.

THE CHAIRMAN: Again, just to be clear, until that become the formal approved process, we are bound by the old list. And that's why you're going to get some vagueness here moving forward. And hopefully by the time we go to a Gazette notice, that thing will be clear what the new list will look like.

DR. THOMPSON: Patsy Thompson.

If I could add, Mr. Binder, as well, one of the staff is proposing to issue a regulatory document and so the regulatory document would be clear based on the final approved list.

MEMBER McDILL: Thank you. And this, I guess, would also then affect the requirement under 2012 for alternative means. If it's a big "M" Major, there'll have to be alternative means looked at and, if not, a 33 per cent "no" or a 36 per cent "yes".

DR. THOMPSON: Patsy Thompson, for the record.

I would venture to guess that, if a

percentage remains in the project list, it will be black and white. But, regardless of what that number is, we have the authority under the *NSCA* to conduct the right level of assessment for any expansions of projects.

But, I would add -- ask Brian Torrie to clarify.

Ms. McDill, you mentioned that, depending on the project list, the factors may or may not -- and I'm not sure -- that's not quite how it works, so I'll ask Brian to clarify when the factors apply.

Mr. TORRIE: Brian Torrie.

So, under the new *CEAA Act*, unlike the previous *CEAA Act* where there were some -- some factors that were mandatory, under the new Act, all the factors are mandatory.

So, if a project is on the project list, say a new mine, it would have to consider alternative means because that's one of the factors to be considered, as it would have to consider the whole -- the whole suite of those factors to be considered.

MEMBER McDILL: But if it comes down the EPA determination path; is it somewhere in that long list?

Mr. TORRIE: Well, if -- for the EPA, I think as discussed the presentation; we have the flexibility to add any of those factors under the *NSCA*

because we have the ability to do that. So, if we wanted to add alternative means in the DPA Assessment, we could.

DR. THOMPSON: Patsy Thompson.

If I could add examples. Under the *NSCA*, there is a requirement for Proponents to -- or Applicants, sorry, to identify mitigation measures or measures to eliminate or reduce environmental effects.

And it's in that context that, likely, alternative means would be looked at. And if an Applicant submits facility designs or mitigation measures that would not effectively protect the environment or would not meet modern best practices, then that's where the CNSC under the *NSCA* would have that authority.

MEMBER McDILL: So, alternative means would not necessarily mean -- let's say, using solar instead of nuclear?

MR. TORRIE: Brian Torrie.

That's considered alternatives to the project and that's been -- that's been removed from the *CEAA*.

MEMBER McDILL: That's what I was trying to get to because it's -- sorry, some times it's hard to get to the question.

Do you think the public, in looking at this document, would see it that way?

DR. THOMPSON: Patsy Thompson, for the record.

The *Canadian Environmental Assessment Act 2012* has been promulgated and it's in force since July 2012. And so, that is now the law of the land. And, as the CNSC as the nuclear regulatory body, I don't think we would have the authority to request that Proponents or Applicants consider other, for example, means of producing electricity.

THE CHAIRMAN: No, but I think the Act is quite clear in the language. You just boiled it down to two words, but I think it's quite understood: this is not a policy alternative to the project. And, I think it's pretty clear in the Act.

I don't know if it's clear in the deck here, but it's clear in the Act and I presumably -- it should be clear in the consultation paper that we comfort.

DR. THOMPSON: Patsy Thompson.

The Act is crystal clear.

MEMBER McDILL: It's not an optimistic (ph.) policy, anyway. It's just that somebody looking at this picture will see -- and who doesn't pick up the Act and read the Act may make a misinterpretation.

I actually have one more question and then I'll pass it along.

In terms of old EPAs, we have some guidance from the courts under the previous *CEAA Act*. Is the expectation that that guidance will continue? That there is no stale dating of an EA?

DR. THOMPSON: Patsy Thompson, for the record.

We have had similar discussions with current licensees in terms of, for example, wanting to do environmental assessments now and potentially looking at licence applications several years down the road.

What we've indicated to licensees is that it's an option they can pursue. But the expectation is that if there's a long time delay, that we would need to review the technical scientific bases, the design and essentially project details as well as any changes that may have happened in the environment in the interim.

And so, there is no guarantee that all the work that was done would still be relevant, and so, we would need to update and revise, as necessary.

MEMBER McDILL: So, a GAP analysis is still going to be carried over regardless?

DR. THOMPSON: That's correct; either under the *CEAA Act* or the *NSCA*.

MEMBER McDILL: Yes.

Mr. Elder?

MR. ELDER: Just -- Peter Elder, for the record.

I think we clearly nod. We will, while you can, go ahead and get EA in advance. Everybody is aware: there's still licensing decisions and that licensing decision must meet all the requirements of the *NSCA* at that time the decision is made.

So, you know, you can potentially park the EA, but everything would be reviewed and making sure it's still adequate to make that decision under the EA, under the *NSCA*, when that decision is made.

THE CHAIRMAN: Again, for clarification, let me understand.

Don't we go through this practically every time we renew a licence, for example? Or there's a, let's say, a five-year licence renewal; doesn't somebody takes a look and say whether the existing EA and the existing provisions and mitigation still apply, and therefore, there's nothing new needed to be done?

DR. THOMPSON: Patsy Thompson, for the record.

In terms of environmental protection, you're right. The process used by staff is to look at all our compliance activities, all the monitoring reports for both effluent and environment to ensure that the levels of

environmental impacts are not growing, are -- essentially remain what we had anticipated them to be.

There's also, with the introduction of the new CSA standard, N288.6, an expectation that environmental risk assessments will be reviewed on a five-year basis and updated as needed to take into consideration changes in facilities, changes in environment, and other factors.

THE CHAIRMAN: After all, many of the environmental assessments are done to anticipate mitigation over 60, 100 years. So, presumably, a one or two-year delay in implementation will not be that significant. Do I get it right?

DR. THOMPSON: Patsy Thompson.

That's correct.

THE CHAIRMAN: Okay.

Thank you.

Doctor McDill?

Miss Velshi?

MEMBER VELSHI: Thank you.

I've got a few minor questions, but, before that, I do want to compliment you for what I thought was a very well-thought through submission and the initiative itself is excellent.

The semantics of EA and EPA, and I don't

know if the EPA would be seen as “EA light” or anything like that, and I don’t know -- did you have any concerns on that?

DR. THOMPSON: Patsy Thompson, for the record.

There was a lot of discussions internally in terms of coming up with the term “environmental protection assessment” and the intent was to clarify that the EA, under the *CEAA Act*, is actually a process and, similarly, the EPA is a process as well.

But both processes rely on, of course, public review, public consultation, Aboriginal consultation; but in both cases, there needs to be a rigorous scientific and technical basis to support both processes.

And the technical and scientific basis is actually the environmental risk assessment that looks at assessing risks to human health and to non-human components of the environment.

So, in both cases, the technical basis is the same and, so, the names were chosen to reflect the processes.

MEMBER VELSHI: Yes, I know. I understand the differences in the two. I just wondered the perception that makes it around EPA versus EA.

DR. THOMPSON: Patsy Thompson.

I guess we will know when we do the public review of the regulatory document.

MEMBER VELSHI: On Slide number 12, more for clarification, where you've got the participation criteria. I wasn't sure what the second set of criteria meant, you know, existing knowledge of site and so on. Are those factors to determine participation extent?

MR. TORRIE: Brian Torrie, for the record.

The objective here was, if I understand your question correctly, how would those factors fit in?

We are trying to determine how much public participation we're gonna have or Aboriginal participation is not just entirely based on their concern; it also has to be based on the technical aspects of the project. So that second set of criteria feeds into that.

So if we have, for example, a lot of existing knowledge of the site we don't need that extra work or that extra consultation.

DR. THOMPSON: Ms. Velshi if I could? The Appendix B.2 sort of highlights how this would be used and the Commission has received determinations based on this criteria for example the Darlington refurbishment EA and other projects that were considered by the Commission.

MEMBER VELSHI: I know you'll find out when

you go out for input from stakeholders but any big issues that you're anticipating or areas of push-back?

DR. THOMPSON: Patsy Thompson, for the record.

I think you started hearing from some non-government organizations in December with the perception that the changes in the *Canadian Environmental Assessment Act* that have downgraded the environmental protection.

We were hoping by putting those two processes in place together and walking people through the process and all the information we've provided in terms of the standards that are being used that we will alleviate that concern.

The other concern that is likely to come is from Applicants and Proponents in terms of having the perception that the changes in *CEAA Act* were to focus on major projects and that we're trying to do what the government did not want us to do anymore. And we've tried to clarify in the documents presented to you today that even in the absence of the *CEAA* legislation, the Commission still needs information on environmental protection to be able to make a decision under 24.4.

MEMBER VELSHI: And ---

THE CHAIRMAN: Can I jump piggyback on this one? I thought that one of the battle cry we hear is

we're looking for review panel in practically everything. So now when will there be a review panel in the future? How will there be review panels under our system? And what is the residual power of the Minister? You know, I don't think the residual power of the Minister, it may impact on us if memory serves right it's describe here anywhere. Please bring us up?

MR. TORRIE: Brian Torrie, for the record.

I'll start off anyway. There are no more review panels for the nuclear projects, the Commission is the reviewer now or is the panel.

And as, I think we had in the presentation, the Commission could establish a panel of the Commission to look at a particular project. The only circumstance where the Minister of the Environment or actually it's the Governor in Council would be involved is if the Commission determined there were significant effects and then it would go to Governor in Council to assess whether those effects are justified in terms of the EA being approved. So that's really the only involvement beyond the Commission under the *CEAA Act*.

THE CHAIRMAN: So even if it's under the *CEAA Act*, under the project list, the Minister cannot on their own decide that this issue be done through some sort of review panel?

MR. TORRIE: No. But the Minister of the Environment is responsible for the project list so he or she could add something to the project list.

And I think that's why, for example, the EPA is important because it's a formalization of really what we're already doing but it's visible to people in terms of rigor of the assessment that we'll do. And so for those projects that people may think should be on the list, it demonstrates that we're doing a complete environmental protection assessment review.

THE CHAIRMAN: Thank you.

Ms Velshi?

MEMBER VELSHI: Do you anticipate the need for additional CSA Standards with the introduction of this regulatory document? And you started off with -- the CNSC already has a pretty robust framework; do you see some currently existing regulations being rescinded and now being absorbed in this new proposed document?

DR. THOMPSON: Patsy Thompson, for the record.

The CNSC staff are looking at the environmental protection regulatory framework. And you may recall that about this time last year that we issued two discussion papers on environmental related subjects on groundwater protection and effluent limits.

We're also working with our colleagues in the Regulatory Affairs Branch looking at overall when the *Nuclear Safety and Control Act* and the regulations were being drafted in the mid-'90, the AECB had no experience with environmental protection. We had some experience with environmental assessment under EARPGO and under *CEAA*.

And so a lot of the regulations are drafted as either information to submit to the Commission or they are EA like of requirements. There isn't a lot of environmental protection requirements per se. And so we are looking at all the elements of environmental protection assessment that are in our regulations currently, and to see whether or not we need to update them.

We also have a Memorandum of Understanding with the Department of Fisheries and Oceans that is being finalized. And Fisheries and Oceans Canada is going through an exercise of reviewing the *Fisheries Act* to see whether or not they could delegate other authorities to the CNSC and some of this may require additional regulatory provisions.

And so we are doing this more comprehensive assessment of our regulatory framework and whether or not we need to go further. But this is something that is ongoing right now and we would come to the Commission when

the time is right.

THE CHAIRMAN: Okay. Back to the beginning.

Monsieur Tolgyesi, any other question?

MEMBER TOLGYESI: It's just that when you are looking at the *CEAA* and at page 23, which is a timeline, you know the long sheet; it's about 9 to 24 months the process and it doesn't count for conduct of EA technical studies. So it could be much longer. I don't know -- you know when you are looking at mining projects, for instance, it would be kind of long processes.

DR. THOMPSON: Mr. Tolgyesi, maybe if I understand you right, you're looking at the second row of Appendix B.1 and what you're saying is that number of days that are at the end ---

MEMBEER TOLGYESI: Two seventy two (272) to 721, yeah that 9 to 24 months and it doesn't include this conduct of EA technical studies.

DR. THOMPSON: It does include our technical review of Proponent's submissions. It does not include the time the Proponent will take to submit and prepare their documents.

We can't be responsible for the time the Proponent will take to do all their environmental work and submit their technical support documents to the CNSC.

MEMBER TOLGYESI: And how it will work one -- you know, what -- what industry's sometimes is complaining is that environmental departments, they are extending -- extending their licensing period or study period. When you are looking at Strateco they have all these licences but only one note.

Is something – what eventually if we give our response or licence to -- to proceed, how it will fit with other jurisdictions; if there is a -- there is a like first request to -- to do some additional studies? How we will handle that?

DR. THOMPSON: Patsy Thompson, for the record.

The -- the process that -- excuse me, that we're presenting today for the *Canadian Environmental Assessment Act* and for the NSCA are the technical reviews that are needed to make this -- for the Commission to make decisions under both of these legislation.

We have also included provisions for coordination with other jurisdictions and for -- in cases where CEAA doesn't apply for example to providing technical support to other EA legislation.

Having said that, the -- you know, should the Commission issue a positive EA decision under the CEAA and a positive licensing decision under the NSCA,

Proponents are still responsible to obtain the approvals and licences required from other jurisdictions.

There is not a lot that the CNSC can do in those cases. We can cooperate technically. We can discuss, you know, project impacts beyond the CNSC licensing requirements. But ultimately it's the Proponent's responsibility to obtain the -- the permits and licences they require from other jurisdictions.

MEMBER TOLGYESI: More -- Mr. President, is not I'm looking for some work for Marc -- for Jacques, but you know with this new approach, fisheries and oceans will become a kind of support consultant to us. The CNSC will decide if -- what are the processes and give a final decision on -- on the EA.

What if fisheries and oceans fundamentally -- they don't agree with something? What -- what happens then?

DR. THOMPSON: Patsy Thompson, for the record.

The situation before *CEAA 2012* came into force was that the Department of Fisheries and Oceans had -- were the responsible authority under the CEAA. Projects for example where the -- the Commission was a responsible authority and the Minister of Fisheries and Oceans was a responsible authority. Both the Commission

and DFO had to make a decision under the CEAA.

We have had no projects where we had not been able to work with the Department of Fisheries and Oceans and the Proponent to allow the Commission and DFO to make a positive EA decision.

And so I would say that the past is a -- probably something that we can rely on to predict the future. But essentially the expectation is that we will work with DFO to understand their regulatory requirements.

We now have a Memorandum of Understanding that is almost final where we have the responsibility for the technical work. And DFO would have the permitting decision.

But all of that and the experience we've had working with DFO technical staff over the last probably five or six years I think would put us in a good position to make sure that the Commission considers all aspects that DFO needs considered to be able to make their permitting decision.

THE CHAIRMAN: You cannot however, take away the power of the Minister of Fisheries and Oceans that has to permit. The only hope is that all the staff work now will become coordinated by CNSC. We will do -- we have the technical expertise and DFO will now -- we set the priorities in how many resources we'll put into rather

than beholding to fisheries and oceans doing their own internal studies.

So it's an efficiency gain. It doesn't take away the power of the Minister to approve. Nor the Minister of Environment, nor provincial -- so we got to do all this work and hopefully we can get our priority approval from the various jurisdictions that what we do is -- will go directly to Ministers.

So that's really the -- the advantage here.

DR. THOMPSON: Perhaps Mr. Binder, if I could -- Brian has just indicated that we already do that for -- for screenings. We've been coordinating quite effectively.

And I wanted to add that the -- the provisions of -- some of the provisions of the Memorandum of Understanding that is being finalized have training of CNSC staff on policies and procedures that DFO uses. And so the expectation is that there will be not a transfer from DFO to the CNSC specialist. And the work that we do will be deemed to be appropriate by -- by DFO. Recognizing what Mr. Binder has said that ultimately it's their decision.

LE PRÉSIDENT: Monsieur Harvey?

MEMBER HARVEY: Even if you've got timelines, there is a point where you will face a certain

problem like we had in Quebec with the Minister of Environment, is the fact that when you receive the submission, the EA.

And then you've got many experts working on that and saying I've got one question, another question. And then all those questions are sent back to -- to the Proponent. And then there is a game between some experts. It could be another ministry. And this is the point where you've got to be very cautious because the -- the time to -- to satisfy many experts is sometimes very long.

So you've got to be -- take it very seriously because we, in Quebec, did that -- it was a -- it was there -- it was very important because it was not that bad. We had four months to do the job. And it was finished sometime in three months, two months. But the contact between the ministry and the Proponent was the weakness of the -- all the line. That's just a comment.

DR. THOMPSON: I -- Patsy Thompson.

I would agree. But the -- the fact that we now have in place work plans and that we consult with you know, provincial and our federal partners and the Proponents in developing their work plans. We have much more of a project management approach to managing EA's.

And I would also say that our EA specialists are probably among the -- you know, the better

project managers. But they're also very good at consensus building and negotiating.

And we've had you know, several issues over the last few years that have been successfully resolved by the work of the EA specialists working with various specialists from the CNSC and other departments.

THE CHAIRMAN: My only comment is that there will always be a debate among the scientific community because it's a very complicated inter-related issues. If it was simple and straight forward we wouldn't need a Commission that will deal with some of those issues.

However, there's been some mechanism and you know you didn't mention anywhere in the report that I could see the role of the MPMO.

I assume that the MPMO will still continue to be -- this is the major project office where the deputy ministers, all the deputy ministers are sitting around the table and there's a project agreement that gets signed in -- on major projects. I assume that's going to continue.

And they -- what's good about that process is that any particular delay or particular issue can be raised up that line. And there is a weekly monitoring on progress of some of those projects.

Anybody want to comment?

MR. TORRIE: Yeah. Brian Torrie.

Yeah, the CEAA projects will still be subject to the MPMO requirements and oversight.

And so for example if there was an issue with DFO, they wouldn't resolve it from a technical point of view but they can bring the groups together to try and resolve that problem or if there was an issue with another jurisdiction they might also be involved.

And as you said the advantage of the MPMO is that it can bring those issues to a senior level much quicker. Whereas in the past they tended to stay down at the working level and then weren't raised until much later in the process but now there's a mechanism there to make sure these things are addressed up front.

THE CHAIRMAN: Any other question?

Ms. Velshi?

MEMBER VELSHI: No.

THE CHAIRMAN: I just -- just on your table, as Mr. Tolgyesi mentioned, I think the table should be crystal clear. So for example on a technical review, you should say it's the Proponent or the Applicant time, if it's not applicable.

And on the last one on column 13, I assume, you're mentioning this is the Commission decision on the EA and licence. Is that not right?

The whole idea is that this is the integrated or -- and/or because I think it's very important to explain that the 24-month is a maximum.

I don't see -- presumably you'll develop some service standard. I don't see the EPAs taking 24 months unless they're really integrated with the licensing. And even then I don't consider them to be -- will take 24 months the same way as the CEAA Project List project.

DR. THOMPSON: Patsy Thompson.

If you look at column 12.

THE CHAIRMAN: Yes.

DR. THOMPSON: Where it says "Commission hearing on the EA report and license if integrated." And so it's an integrated hearing. But 13 was meant to indicate that under the CEAA, the Commission has to issue a decision on the EA first and we've put 1 to 30 days as the Commission standard on issuing a decision.

(LAUGHTER/RIRES)

THE CHAIRMAN: Well yes, but it doesn't say decision. It says hearing, on 12.

DR. THOMPSON: Twelve says hearing. Thirteen says the actual EA decision.

THE CHAIRMAN: But not the licensing decision?

DR. THOMPSON: No because the licensing decision has to be announced later and so it's ---

THE CHAIRMAN: I know but it counts.

DR. THOMPSON: But we will clarify -- no I agree.

THE CHAIRMAN: Yes but it says -- you said, not applicable at the bottom to the EPA even though it's could have been an integrated. So there has been a decision.

Anyhow, what I'm trying to say is that if you're going to use this table, it should be really, really, clear.

DR. THOMPSON: The sense I have Mr. Binder, from the discussions we've -- what we've heard today and discussions we've had, that that table was for the purpose of the CMD. It's not what we would put in a regulatory document. It would need to be much clearer.

THE CHAIRMAN: Okay. The last question I have is, you know me, I like to know what is the future deliverables? So, by when do you expect to have a regulatory document all done?

Because in the meantime, presumably you are working without regulatory document or cover that explains what you just presented.

DR. THOMPSON: Patsy Thompson.

We have the process for the EA under CEAA pretty well documented. We've been adjusting our documentation to align with *CEAA 2012*. The EPA process has not yet been documented to that extent.

We expect that we could have a regulatory document available for public review in the fall. But our preference would be to wait until the official project list is, you know, the project list is official so that the regulatory document we issue for public review actually reflects the new requirements.

THE CHAIRMAN: I know but don't -- don't wait -- don't do it sequentially. Do it in parallel because our process takes a while too.

DR. THOMPSON: Patsy Thompson.

It is being done in parallel. So we will document the process, get the approvals, the documents translated so they can be issued for public review in the fall.

THE CHAIRMAN: Okay.

Anything else?

Thank you.

Thank you very much. We are going to break for -- until -- come back at 11? Thank you.

--- Upon recessing at 10:46 a.m./

L'audience est suspendue à 10h46

--- Upon resuming at 11:00 a.m./

L'audience est reprise à 11h00

6. Decision Item

6.1 Regulatory Document presented

For approval: RD/GD-338,

Security Measures for Sealed

Sources

THE CHAIRMAN: Okay, the next item on the agenda is regarding a regulatory document presented for approval RD/GD-338 "Security Measure for Sealed Sources".

I will turn the floor to Mr. Raoul Awad for this presentation, as outlined in CMD 13-M16. Mr. Awad, the floor is yours.

13-M16

Oral presentation by

CNSC staff

M. AWAD: Merci, monsieur le président.

Bonjour monsieur le président et mesdames et messieurs les Commissaires. I'm Raoul Awad. I'm the Director General of Security and Safeguard.

With me today Mr. André Régimbald, the Director General of the Nuclear Substance Regulation; Mr.

Michael Beaudette, the Director of Nuclear Security Division and Mr. Mark Dallaire the Director General of Regulatory Framework Division -- Directorate, sorry; and Mr. Colin Moses and some subject matter experts that will be available to answer your questions.

The presentation today will cover the proposed regulatory document “Security Measures for Sealed Sources”. As you know, the security of sealed sources has been a concern due to the possibility that such material could be used for malicious purposes.

For this reason in September 2003, the International Atomic Energy Agency (IAEA) approved the code of conduct on the safety and security of radioactive sources. In 2005, Canada was one of the first G8 countries to adopt the code with the objective to achieve high level of safety and security of sealed sources.

Since that time, we implemented adequate measures and best practices to ensure the security and the safety of radioactive sources. And this regulatory document will formalize and clarify our requirement and recommended best practices and align our requirement with IAEA nuclear security series.

This presentation as well as the information before you are in support of the CNSC staff recommendation to proceed to the publication of this

document.

Today's presentation will cover the following topic: the new nomenclature system for the regulatory document will be presented by Mr. Marc Dallaire.

And then the regulatory control of sealed sources in Canada, sealed source registration and tracking and the purpose of this regulatory document, the consequences of radioactive dispersal devices (RDD) or what they call dirty bombs, various category of radioactive sealed sources in Canada, some examples and application and technical administrative requirements, implementation and consultation process and key comments from our stakeholders. Finally we'll provide you with the conclusion and the recommendations.

Before we present the detailed information on the regulatory document Mr. Mark Dallaire, Director General of Regulatory Policy Directorate, will give a short presentation on the modernized nomenclature.

Mr. Mark?

MR. DALLAIRE: Thank you Raoul. For the record, my name is Mark Dallaire. I am the Director General of the Regulatory Policy Directorate.

You will have noted on the proposed draft document that we have updated the nomenclature of our

regulatory document. Given that this is the first document that we plan on issuing under this new nomenclature, I would like to take this opportunity to provide a brief overview of the change.

Over the past years, CNSC has had as one of its strategic objective clarity of requirement.

This work has had several dimensions providing clarity, regulatory requirements needed to support licensing and compliance -- that is what needs to be done by licensees or applicants -- and providing applicants and licensees with guidance on how to meet those requirements.

We've also been attentive to the need to help applicants and licensees apply for licences and have developed a number of licence application guides and providing information on regulatory processes where this is needed.

While we've done a lot, there remains a need to make all of the information more readily accessible to users and in a structured format. As a result, our efforts are now focused on developing improved ways for both stakeholders and staff to access regulatory information.

This is the next step in the modernization of the CNSC's regulatory framework. It will more fully

leverage web-oriented documentation of requirements, guidance and information, and provide access to existing and future documentation in a way that leverages the CNSC's recent work on safety and control areas.

As you are fully aware, safety and control areas are an important mechanism for Commission and the public to understand the issues we're addressing.

In addition, again to ensure clarity of requirement, we'll be moving to a single nomenclature for all documentation needed regarding regulatory requirements, guidance and processes.

Going forward, it is intended that all documents be classified as REG docs. We will be presenting more details on this initiative at the Commission meeting in May of this year as part of our annual update on the Regulatory Framework Program.

To date, existing and future documentation has been catalogued under three categories subdivided into approximately 30 sections. Category 2 will deal with requirements and guidance related to safety and control areas.

The regulatory document you have before you today falls under Section 2.12 of this revised structure and corresponds to the security, Safety and Control Area. For your information, Section 2.12 also includes existing

documents covering regulatory requirements and guidance for high-security sites.

THE CHAIRMAN: That's -- this is the document that Marc circulated today, so we know what you're talking about, okay? So, this is the Security 2.212 (sic).

MR. DALLAIRE: Thank you, President Binder.

At the time of consultation on this particular document, it was published with a traditional RD/GD nomenclature, and specifically was referred to as RD/GD-338. Should the Commission approve this document for publication, we intend to publish it using the new CNSC REGDOC nomenclature.

I'll now turn it over to André Régimbald to continue the presentation.

M. RÉGIMBALD: Merci, Mark.

Bonjour, mesdames et messieurs les commissaires. Je suis André Régimbald, directeur général, responsable de la règlementation des substances nucléaires.

Ce document s'applique aux sources radioactives scellées qui sont utilisées, transportées ou stockées dans le cadre d'activités règlementées par la CCSN réalisées à des fins médicales, industrielles et commerciales, de même qu'à des fins universitaires et de

recherche.

Le type, la taille et la radioactivité des sources scellées varient selon leur utilisation. Elles sont utilisées dans les appareils à rayonnement et d'autres types d'équipement, comme le montre ces photos.

On voit ici, dans la photo en haut à gauche, un appareil de gammagraphie; plus à droite, une jauge nucléaire portative; au centre, c'est une photo d'un appareil de téléthérapie; et finalement, en bas, on présente un détecteur d'agents chimiques, lesquels sont décrits plus loin dans la présentation.

Il est important de noter que ces appareils et cet équipement doivent être homologués par la CCSN avant de pouvoir être utilisés au Canada.

La CCSN exerce une surveillance règlementaire efficace à l'égard des sources scellées, des appareils et de l'équipement grâce à un système de règlementation exhaustif pour la délivrance de permis et la vérification de la conformité.

Ce système fait en sorte que les titulaires de permis et autres personnes concernées doivent se conformer à la *Loi sur la sûreté et la règlementation nucléaire* et à ses divers règlements ainsi qu'aux conditions de permis.

La CCSN exerce un contrôle règlementaire

sur les sources scellées tout au long de leur cycle de vie allant de leur fabrication jusqu'à leur élimination définitive, en passant par l'homologation de l'équipement et la délivrance de permis pour leur utilisation.

Comme l'a souligné mon collègue, Monsieur Awad, en 2005, le Canada a été le premier pays du G8 à adopter le Code de conduite sur la sûreté et la sécurité des sources scellées -- des sources radioactives, pardon -- de l'AIEA. Les objectifs du Code portent sur l'atteinte d'un niveau élevé de sûreté et de sécurité relativement aux sources scellées, la prévention des pertes, des vols ou de l'utilisation non autorisée, l'atténuation des impacts radiologiques de tout accident ou acte malveillant.

La CCSN classe les sources radioactives scellées en fonction du risque et à l'aide d'un système créé par l'AIEA en vertu de son Code de conduite. L'AIEA a établi cinq catégories de sources scellées allant de la catégorie 1, visant les sources dont le risque radiologique est le plus élevé, jusqu'à la catégorie 5, soit les sources dont le risque est plus faible.

Ce système de classement est largement répandu partout dans le monde et il constitue une approche uniforme à la classification des risques associés aux sources radioactives scellées et aux appareils à

rayonnement les plus couramment utilisés.

The CNSC has in place a National Sealed Source Registry which contains inventory information from licensees regarding sealed sources of all categories, that is category 1 to 5. The CNSC requires licensees to track the movement of category-1 and -2 sources which are the highest risk sources through a condition of their licence.

Hence, licensees must report to the CNSC within specified short time frames when they acquire new sources or when they transfer their sources to another licensee, import or export it, or dispose of it. At the other end, the licensee receiving the source is required to notify the CNSC, again, within a specified short time frame, when they receive the source.

These transactions and reports are done through the CNSC’s Sealed Source Tracking System which is a web-based application that licensees and CNSC staff can use to record and track the movement of sealed sources.

The information submitted through the Sealed Source Tracking System feeds into the National Sealed Source Registry and the tracking of category-3, -4 and -5 sources by licensees are -- is, however, not mandatory.

However, licensees must provide the CNSC with inventory information on these sources on an annual

basis through the submission of their Annual Compliance Reports to the CNSC as required by their licence.

CNSC inspectors verify licensee compliance with sealed source tracking and inventory requirements through compliance inspections. As reported at the last Commission meeting in January, in CMD 13-M6, licensee compliance in this regard is close to 100 per cent meaning that the inventory of the inspected licensees match the information in the CNSC National Sealed Source Registry.

This graph shows the number of sealed sources that have been recorded in the CNSC's National Sealed Source Registry since 2008. At the end of 2012, there were a total of 53,660 sources of all categories recorded in the Registry of which 3,034 were category-1 and 28,585 were category-2 which are the high risk sources.

I will now pass the presentation to Mr. Michael Beaudette, Director of the Nuclear Security Division.

Thank you.

MR. BEAUDETTE: Thank you. Michael Beaudette, for the record.

The purpose of this regulatory document is to set out the minimum security measures that licensees must implement to prevent the loss, sabotage, illegal use,

illegal possession, or illegal removal of sealed sources that are in storage at the site of a licence's activity, are in transport, or that are being stored during transportation by road.

This document provides clarifications on the obligations set out in the *General Nuclear Safety and Control* Regulations that requires reasonable measures to be taken to maintain security, implement a means for alerting a licensee in the event of the illegal use, removal, sabotage, or attempted sabotage of a sealed source and to train workers on the security program at a licensed site.

This document also provides clear regulatory instructions and guidance to the industry and stakeholders to assist licensees with understanding CNSC requirements and expectations in regards to the security of radioactive sealed sources.

Implementing adequate security measures for radioactive sources will assist in the prevention of unauthorized access to such materials and their use for illicit purposes, such as assembling and designating a radioactive dispersal device or RDD, commonly known as a "dirty bomb", or the employment of a radioactive emitting device or RED.

Such devices could cause airborne or

surface contamination. They could contaminate large, densely populated or critical economic areas, such as the centre of a metropolitan city. Radioactive contamination from an RDD could render an area off-limits for many years. It could also require a massive cleanup effort, possible demolition and reconstruction of buildings, and have a significant impact on economic activities and the environment.

In addition, an RDD would have a significant societal disruption effect and could cause fear, distrust, and a loss of public confidence. In the long term, an RDD could result in serious health effects on the population contaminated and would cost millions of dollars in economic cleanup and remediation.

This regulatory document applies to radioactive sealed sources that may pose significant risks to individuals, the public and the environment.

As stated earlier, sealed sources vary in types, size and radioactivity depending on their usage. For this reason, security requirements are based on a graded approach. From a security perspective, category-1 to -3 present the highest radiological risk, while categories 4 and 5 are considered to present the least risk.

This document applies to radioactive sealed

sources that are in transport by road or are in storage within Canada. Other United Nations specialized agencies, intergovernmental organizations and programs, such as the International Maritime Organization (or the IMO), the International Civil Aviation Organization (or the ICAO), and the Organization for International Carriage by Rail have taken similar steps to improve security in the transport of dangerous goods carried by rail, sea and air.

This document will apply to category-1, -2 and -3 radioactive sealed sources. The document also provides prudent management practices for categories-4 and -5 radioactive sealed sources. These material thresholds and categories are based on the IAEA Code of Conduct on the Safety and Security of Radioactive Sources. These thresholds will provide consistency between domestic and international efforts in the protection of radioactive material.

The IAEA Safety series of documents, specifically the categorization of radioactive sources document provide the methodology for the development of the Code of Conduct thresholds.

This document does not apply to radioactive sources belonging to the Canadian military or defense programs. These sources are the responsibility of the Department of National Defense, specifically the Director

General, Environment and Nuclear Safety.

I would now like to provide you with a few examples where various categories of radioactive sources had been incorporated into radiation devices and other equipment for medical, industrial or commercial applications.

Here is an example of Cobalt-60 sources used in pool-type irradiators to sterilize medical products. Category-1 sources are the highest risk category as per the IAEA Code of Conduct that are used in Canada. They are required to be tracked by the licensee and reported to the CNSC. Since they pose the greatest radiological risk, category-1 sources must always be used in well-shielded and well-controlled locations.

Here are a few other examples of category-1 sources. On the left is a teletherapy source used for cancer treatment; on the right is a blood radiator used for sterilizing blood products in medical facilities.

Moving to examples of category-2 sources, the top two images are of devices commonly known as “Industrial Radiography Exposure Devices”. They are portable and are widely used in pipeline work and in pressure vessel fabrication shops, particularly in the oil and gas industry. The photo on the bottom shows a high-dose rate brachytherapy machine used for medical

treatment.

Here, we have two examples of category-3 sources. On the left is an example of a logging source used in oil well surveying; on the right is an industrial fixed gauge used to measure industrial processes.

More numerous are the portable gauges containing category-4 radioactive sources. On the left are portable soil moisture density gauges that are most commonly used in road construction; on the right is an example of a category-5 source, an electron capture.

In this particular example, the device is being used by the Canadian Border Services Agency to detect chemicals associated with illegal narcotics or explosives.

I would now like to focus on the regulatory document itself. This document is divided into three sections. The first is related to technical security measures for sealed sources and includes requirements and specific guidance for: access control to limit access to authorized users; detection of unauthorized access using alarms or human surveillance; locking hardware and key control; physical barriers to provide sufficient delay to allow response forces time to react; alarm response protocol including contingency plans; inspection, maintenance and testing of security-related equipment;

and, guidance for security officers, where applicable -- for example, at high-security sites, hospitals, and university research facilities.

The second section is related to administrative security measures. It includes requirements and specific guidance for: the production and implementation of a site security plan; security awareness programs including training for all authorized users; personal trust worthiness and reliability verifications for individuals requiring unescorted access to high-risk sources; protection of prescribed and/or sensitive information such as security plans, threat and risk assessments, et cetera; and, inventory control of radioactive sources for security purposes.

The third section is related to security measures during transport and includes instructions and specific requirements for: vehicle security; security measures for sealed sources during transport; and, a transport security plan for category-1 and -2 sources.

I would now like to provide you with details regarding the consultation process and key comments received by CNSC.

The requirements in this document were originally set out in two draft regulatory standards: S-322 “Physical Security Requirements for the Storage of

Sealed Sources” and S-338 “Physical Security Requirements for Sealed Sources during Transport”.

The first public consultation took place in November 2006 resulting in 133 comments from approximately 31 reviewers for S-322 and 191 comments from approximately 39 reviewers for S-338.

In 2010-2011, these two draft documents were merged into one regulatory document called Security Measures for Sealed Sources.

The second public consultation took place from March 21st to June 8th of 2012. CNSC received 127 comments from approximately 22 reviewers including four classified comments.

CNSC staff conducted outreach activities through the DNSR radiography meetings in Edmonton and in Ottawa in May of 2012 and with the Oil Well Perforators’ Committee of the Petroleum Services Association of Canada in Calgary in the same month.

I would now like to provide you with a few examples of the comments received. Stakeholders asked for more guidance on the personal trustworthiness and reliability process involving criminal record name checks. In response CNSC staff provided additional guidance for trustworthiness and reliability verification and added an example of a CR, criminal record name check process in

Appendix B of the regulatory document.

Also the CNSC has agreed to recognize alternatives to the criminal record name check. These alternatives include, a nexus card issued by the Canada Border Services Agency, a Free and Secure Trade Card issued by the Canada Boarder Services Agency, a firearms possession and acquisition licence issued under the *Firearms Act*, a permis général issued under the Quebec Explosives Act, and a security screening letter delivered by Natural Resources Canada Explosives Regulatory Division.

As the Commission is aware prior to presenting a regulatory document to the Commission for approval, the final draft along with a disposition table is sent to all stakeholders. As a result of this practice, one stakeholder very recently suggested that CNSC also include as an alternative to the criminal record name check, the Government of Canada Public Works Control Goods program security assessment process. CNSC staff reviewed the suggestion and agreed that it is an acceptable alternative to a criminal records name check.

Consequently CNSC staff would like to propose that an additional bullet point be added to the list on page 19 of the English version and page 22 of the French version of this document to include this additional

option to the criminal record name check.

Some high security sites asked for clarification on the implementation of security measures for sealed sources at nuclear power plants. Nuclear power plant sites have security measures in place that are often beyond some of the requirements outlined in this REG doc.

However these licensees must demonstrate that they maintain proper control of sealed sources both when they are stored by them on site or when they are shipped -- when they ship them to other companies.

In cases of high Security Nuclear sites, the expectation is that the licensee will provide the required details as to how they meet the applicable requirements. In particular if sources leave the site, the requirements and security measures for sealed sources will apply.

Stakeholders also expressed concerns on their limited capability and resources to ensure compliance by subcontractors and verification of large inventories. For large inventories, the CNSC staff maintained performance based language because inventories vary from one site to another and the verification is based on a graded approach.

The frequency and depth of these verifications varies from site to site. In addition

subcontractors are not licensed by the Canadian Nuclear Safety Commission and therefore are not subject to security requirements applicable to CNSC licensees.

This document is intended to assist licensees with contracting carriers so as to ensure that specific security measures are taken into consideration when transporting sealed sources during storage or storing them while in transit.

In conclusion, further to the requirements and obligations set fourth in the *Nuclear Safety and Control Act* and its regulations, the issuance of this regulatory document will provide a clear and consistent set of comprehensive requirements regarding security measures for radioactive sealed sources.

The incorporation of security measures for sealed sources by the various effective licensees will also serve as the cornerstone to align CNSC regulations with the IAEA code of conduct, the IAEA nuclear security series documents as well as international best practices.

In closing, CNSC staff would like to make the following recommendations. Firstly that the Commission approve regulatory document security measures for sealed sources and that this document supersedes the draft regulatory documents S-322 and S-338.

Secondly that the security measures for

sealed sources be incorporated into licence conditions within the next two years for sites with high risk category-1 and -2 radioactive sources.

And finally that the security measures for sealed sources be incorporated into licence conditions as licences come up for renewal for medium and low risk category-3, -4 and -5 sources.

This concludes the presentation by CNSC staff and we are now available to answer your questions.

THE CHAIRMAN: Thank you.

Okay let's start the question session with Dr. McDill.

MEMBER McDILL: Thank you.

I think it's an excellent document; I congratulate you on bringing it all the way to here.

I have only one question and it's very minor. It's on page 15 of the REG doc.

And it's mostly a matter of interpretation because I assume that the people who were using this document will have a better understanding.

In two places at the top of the page, you've used the term "non-removable screws." Screws are threaded and anything that's threaded is usually removable. So my question is, is it non-removable because the threads have been plastically deformed? Is it non-

removable because it has been cemented in place or is it non-removable from the outside?

MR. AWAD: Actually both apply. Some of the screws could irremovable from outside, could have access from inside and some of them have -- top of the screw is deformated in such a way that they cannot remove it. That what we call affixed or non-removal screw.

MEMBER McDILL: It could either be that it's not removable from the outside but could be removed from the inside?

MR. AWAD: Exact.

MEMBER McDILL: Or there's been -- the head is not accessible with a socket or driver of some kind.

That's fine. I'm just looking for interpretation of what that meant.

THE CHAIRMAN: Thank you.

Monsieur Harvey?

MEMBRE HARVEY: Merci monsieur le président.

Première question, pouvez-vous nous donner une idée du nombre d'appareils qui sont dans vos inventaires et -- du nombre et de la différence, ce que je veux dire, des différents types d'appareils?

M. FAILLE: C'est Sylvain Faille.

J'ai pas l'information avec moi

directement. Mais on peut vous donner l'information. On a l'information de disponible. Il y a une grande variété d'appareils qui sont utilisés au Canada ici dans les -- on a probablement entre 2,000 et 3,000 certificats d'émis pour les différents types d'appareils qui contiennent des sources scellées.

On a l'information. On va pouvoir vous la fournir ---

MEMBRE HARVEY: Non, ça me va. Je voulais avoir une idée du parc. Ça me suffit de savoir les 2,000 appareils, il y en a peut-être, je ne sais pas, 200 différents, je ne sais pas; juste une idée.

M. RÉGIMBALD: Ici, André Régimbald.

Sur le site web de la Commission, il y a une liste de tous les appareils homologués. Alors, ça va être facile de vous fournir l'information.

MEMBRE HARVEY: Est-ce que le niveau de dangerosité ou le niveau de -- est indiqué sur chaque appareil de votre classification, -1, -2, -3, -4, 5? Est-ce que c'est sur les appareils?

M. RÉGIMBALD: Vous voulez dire l'identification, si c'est une source de catégorie -1 ou -5?

MEMBRE HARVEY: Catégorie -1, catégorie -2.

M. RÉGIMBALD: Non, ce n'est pas indiqué

sur l’appareil.

MEMBRE HARVEY: C’est pas indiqué ça.

M. RÉGIMBALD: Sylvain, est-ce que tu peux ajouter des informations?

M. FAILLE: Oui, juste pour clarifier. Effectivement, le niveau de la source -- le niveau de -- la catégorie de la source est pas indiquée sur l’appareil même mais l’appareil contient l’activité de la source à l’intérieur qui est contenue dans l’appareil.

Et de cette façon-là, on peut déterminer quelle catégorie il s’agit. Et puis, pour le même appareil, il peut y avoir différentes activités pour une source à l’intérieur. Il peut y avoir des plus petites jusqu’à des plus grosses, donc c’est vraiment l’information qui est sur l’appareil même qui est utilisé pour déterminer la catégorie de la source à l’intérieur.

MEMBRE HARVEY: Je posais ça dans -- pour voir un peu, parce que ceux qui ont des inventaires assez important avec des niveaux d’entreposage différents, eh ben, il faut qu’ils sachent exactement où placer les appareils.

M. RÉGIMBALD: Oui, les programmes de sûreté qui sont en place par les différents titulaires de permis et régis par les conditions de leur permis sont plus stricts en ce qui concerne les appareils qui

contiennent les sources de catégorie -1 et -2 que ceux qui -- qu'une catégorie moindre.

Alors la sûreté de la source va de concert avec les programmes de sûreté qui sont en place pour assurer la sûreté de la source pour les travailleurs et le public et aussi la sécurité.

MEMBRE HARVEY: Quelques questions rapides, des petites questions.

Qu'est-ce qui se passe pour le militaire? Dois-je comprendre que, pour le programme -- il y a certains programmes militaires que c'est exemptés. Mais le même appareil qui serait utilisé dans un hôpital militaire, est-ce qu'il entre dans votre liste ou il est exempté parce que c'est militaire?

M. AWAD: Raoul Awad.

Pour les hôpitaux militaires, les -- ils sont sous la juridiction de la Défense nationale. Donc, ils sont exemptés dans notre « requirement ».

MEMBRE HARVEY: O.k.

M. RÉGIMBALD: Mais selon les programmes en place au Ministère de la défense, c'est leur politique comme Michael a mentionné tantôt. Le directeur général de la Sûreté nucléaire pour le Ministère de la défense s'assure qu'il y a un programme équivalent à celui que la Commission mettrait en place pour les applications

militaires; par exemple pour le contrôle des sources, la radioprotection, la protection des militaires et le stockage, et cetera.

MEMBRE HARVEY: Est-ce que vous avez des contacts avec le militaire ou c'est ---

M. AWAD: Ils sont dans le même bâtiment que nous; ils sont au 17e étage; alors on a contact presque quotidien avec eux.

MEMBRE HARVEY: Ah, bon.

LE PRÉSIDENT: Si j'ai bien compris, ils utilisent le même -- presque le même règle que nous qui ont -- qui donne ce document?

M. AWAD: Tout à fait. Et on a avec eux un formal MOU that we can always exchange information and benchmark their practice with our practice and vice versa.

MEMBRE HARVEY: Sur le graphique, sur la version française, il y a un tableau « Niveaux et objectifs de sécurité ». Et vous avez les différentes catégories. C'est la page 9 en français. J'imagine que c'est -- le français est un peu plus long, c'est peut-être la page 8 en anglais. C'est le tableau B.

Je m'excuse, c'est à la page 11 parce que les tableaux se ressemblaient. Je m'excuse.

Dans l'encadré, c'est « Sécurité des véhicules », c'est marqué « Règles de deux personnes » et

là, entre parenthèses « (mesures optimales) ». C'est -- la règle des deux personnes, si c'est une mesure optimale, ça veut dire qu'ils peuvent passer à côté?

M. AWAD: Je peux demander à monsieur Raphael Duguay pour répondre à cette question.

M. DUGUAY: Bonjour, mon nom est Raphael Duguay, je suis conseiller en sécurité avec la Division de la sécurité nucléaire.

Effectivement, pour clarification, la façon comme on l'avait écrit, c'était une pratique recommandée donc, nous allons clarifier ça pour s'assurer qu'il n'y a pas de mauvaise interprétation.

MEMBRE HARVEY: Merci.

Je reviendrai.

MEMBRE TOLGYESI: Merci monsieur le président.

Premièrement, je dois me joindre à Madame McDill, dire que le document est bien fait, aussi je trouve qu'il est « User friendly » même pour les crabes de l'ordinateur comme moi.

(RIRES/LAUGHTER)

MEMBRE TOLGYESI: Ceci étant dit, je voudrais savoir, parce qu'il y en a un tableau qui dit comment on classe les catégories. O.k. La catégorie-1, -2, -3 et je pense que la catégorie-1 et -2, il y a là une

différence de 100 fois et entre -2 et -3, 10 fois.

Mais est-ce que quand on transporte les biens et on transporte -- chacun a une certaine radioactivité. Quand on les additionne -- ben, je transporte ça. Est-ce que ça veut dire que ça change de catégorie ou ça change pas de catégorie et ça s'applique tel quel?

M. AWAD: Je vais demander à monsieur Raphael Duguay pour répondre à cette question.

M. DUGUAY: Raphael Duguay, pour le transcrit.

Donc, effectivement, si un titulaire de permis ou un opérateur transporte plusieurs sources, la quantité agrégée donc la somme peut le ramener à une différente catégorie.

Donc, oui, dans l'interprétation, vous avez raison.

MEMBRE TOLGYESI: Merci.

Deuxième, je regardais à la page 28, section française, on parle de véhicule de transport, il dit que -- c'est avant dernier paragraphe -- il y a trois « bullets » « Les dispositifs de sécurité des véhicules », et le deuxième « bullet », il dit « Est testé au moins tous les six mois ».

Est-ce que ces examens ont un registre? Ça

veut dire qu'il y a un « ledger » qui enregistre « bon, le véhicule a été testé à telle fréquence, avec tel résultat » ou parce que ça s'applique, par exemple, aux véhicules de transport en commun?

Mais considérant qu'on transporte les matières de -- radioactives; est-ce que c'est la même chose?

M. AWAD: Raoul Awad, pour le transcrit.

Normalement, oui, ça doit être totalement suivi. Et je vais demander à monsieur Raphael Duguay de clarifier quelles mesures sont implémentées pour ça.

M. DUGUAY: Raphael Duguay, pour le transcrit.

Donc, effectivement, l'obligation, c'est de faire des vérifications chaque six mois pour s'assurer que les mesures de sécurité sur le véhicule fonctionnent telles qu'elles ont été installées.

La majorité du temps, les transports sont faits dans des véhicules qui sont dédiés pour les sources. Donc, dans des véhicules qui sont -- pas dans les transports en commun mais plus dans des véhicules qui appartiennent à la compagnie.

MEMBRE TOLGYESI: Ça veut dire que c'est pas spécifié qu'il y a un « ledger » mais c'est compris quelque part? Parce que -- ou je vois pas, je vois pas

qu'il doit y avoir un registre -- qui enregistre ces vérifications-là là?

M. RÉGIMBALD: Si je peux me permettre -- André Régimbald ici.

Lorsque l'inspecteur va faire l'inspection de l'endroit, il a accès à tous les registres. Et le titulaire de permis doit pouvoir démontrer qu'il a effectué des essais. Donc, il va s'en dire qu'il va y avoir un registre en place. S'il n'y en a pas, nous allons prendre les mesures nécessaires ou le titulaire devra démontrer autrement qu'il a fait les essais.

Mais les inspecteurs vont vérifier les registres et les documents à chaque fois qu'ils font les inspections.

MEMBRE TOLGYESI: Ma question était si l'invention doit pas ajouter quelque chose qu'il dit?

THE CHAIRMAN: But can we understand, we do not licence the vehicle nor the transport, et cetera. We licence the -- the -- the people who own the radioactivity. And if they use a vehicle or company that doesn't do that, they should fire them.

Okay. So it's not -- we don't go after the carriers. We cannot prescribe things on the carriers. We can prescribe behaviour on the -- on the AECL, the OPG, the Nordion's to use companies that do that.

MEMBER TOLGYESI: Here you prescribed that it should be tested. You know. If we are think ---

THE CHAIRMAN: No.

MR. AWAD: Raoul Awad, for the record.

If I can add, this document will be used by our licensee in their contracting requirement for the subcontractor to do the -- to act as a carrier.

THE CHAIRMAN: Right. So it's an indirect imposition of regulations. Right.

MR. RÉGIMBALD: And it is a requirement of the transport regulations that the consignor will be -- the licensee, is responsible for preparing all the shipping documents and making certain that a carrier can transport the material in accordance with the licensee's obligations.

THE CHAIRMAN: Okay, which raises a question -- maybe it's now the time to raise. Yesterday we heard about packaging and transportation regulations. Okay? And that there's a whole set of blah, blah, blah, blah. I assume this is not new or different?

Another way of doing this is -- why don't you refer to the, you know, put all those requirements and transportation to the other document? Like, why is it a stand-alone kind of a document for sealed sources as opposed to -- I'm talking about the transportation aspect

not the rest of the stuff.

Why are we creating another regulatory document for transportation of sealed sources?

MR. AWAD: Raoul Awad, for the record.

For the integration of the security requirement into the regulation of transport of the general transport of radioactive material maybe Mr. Sylvain could give us more explanation why it wasn't integrated?

MR. FAILLE: Yes, Sylvain Faille.

One of the main reasons why it wasn't included in the current drafting instructions that we are preparing is the transport of radioactive materials -- the regulations cover a wide-range of material, including sources but also unsealed sources and other types of material and it was easier to go with the regulatory document to capture only those that require those security measures.

THE CHAIRMAN: I'm always leery about having two regulatory documents. You just said the packaging and transport cover everything, so I don't know why we need, then, not to refer to it when you come to security plan for all of those things. You know by now that I don't like proliferation of regulatory documents.

MR. AWAD: Raoul Awad, for the record.

The whole idea behind this document is to apply the graded approach depending on the risk of this category.

If we will put it into the regulation it will be much more rigid and we will lose this flexibility in applying the graded approach.

As you see the document contains requirements for Category 1, 2, and 3, and a recommended best practice for category 4 and 5, and this mix of recommendation and requirement, it's very hard to achieve it by regulation. It's much easier to achieve it by a regulatory document.

THE CHAIRMAN: I understand that. It's just when you refer to when it's part of the regulation when you're applying you should always refer to -- which lead me to another kind of a question.

Is that 12 point -- this is 2.12? Is it going to be 2.12A, B, for different aspect or is it going to be forever 2.12, and then you're going to add some subchapters?

MR. DALLAIRE: Mark Dallaire, for the record.

You've pointed to a very practical need for a numbering system that allows CNSC staff and licensees to more quickly go to the specific content.

The 2.1.12 is -- captures a broad range of issues. We are right now looking at the need and how we might provide more specificity on the content of a requirement by using 2.1.12.1, 2.1.12A. We haven't landed on that but it is an issue we are looking at right now.

We do recognize that for all users, both inside the CNSC and licensees, this is just a practical day-to-day easy reference for -- to allow them to do their work and we need to address that issue as we move forward.

It's part of our efforts over the next month is to provide greater clarity on that particular issue.

MR. RÉGIMBALD: I'd just like to add, Mr. President, that the document also provides minimum security measures for storage of sources. So it's storage and transport integrated into one document.

So if we would have put the transport requirements in regs and this we would have two sets. So it was better for us to focus and integrate the measures for storage and transport under one document.

And as Mr. Awad indicated and tailored to the specific licensees.

THE CHAIRMAN: I understand all of this and I don't mind repeating it as long as it's the same rules that apply under the other transportation and it's not new

rules.

MR. AWAD: Raoul Awad, for the record.

Definitely there is no contradiction or no different rule. The same rule is applied.

THE CHAIRMAN: Thank you.

I'm now on Ms. Velshi.

MEMBER VELSHI: Thank you, Mr. President.

So I'm not -- I don't have the history behind this document but it seems like it's taken quite a bit of time to get to where we have with the IAEA in 2003 and your early efforts in 2006.

So if it isn't too long a story why the delay in getting to this point?

MR. AWAD: Raoul Awad, for the record.

Actually when Canada adopted the Code of Conduct in 2005 directly we start working on two documents, 2-S document, which is issued in 2006 and issued as draft at that time but it was applied all over our licensees.

Then it wasn't an urgent need to finalize this document, and now, recently, we merged the -- both documents under the new regulatory framework and we created this document.

MEMBER VELSHI: So the two draft documents were actually being adhered to and implemented by the

licensees?

MR. AWAD: Yes. All the security measures on almost all the licensees was implemented but it was still draft document.

And our inspectors, when they're doing their inspections, are using this document to verify the compliance but we are using also the general regulation that the licensee must implement -- must implement a security measure, and in conjunction with these two draft document we applied almost -- to all our licensees.

MEMBER VELSHI: Thank you.

My next question in the RD, on page 8 and 9, where you talk about the security level and security objectives. And I understand that this is a high level presentation of it, but if I look at Categories 1 and 2, the only difference appears to be around the security plan where Category 1 requires a specific plan approved by the CNSC and the -- for Category 2 it's a generic plan.

Is that really the only difference on the management of the two different categories?

MR. AWAD: Raoul Awad, for the record.

There is multiples differences and I will ask Mr. Raphaël Duguay to explain what the difference between the security measures of this case is.

MR. DUGUAY: Raphaël Duguay, for the

record.

So you are correct, the requirements are more stringent for Category 1, for security plans and security management in general. But it also applies to some of the physical security measures such as barriers, detection, and response protocol.

So the way it's worded it's more stringent for Category 1 and there's some implicit -- there's more specific information inside of the documents when we look at the specific areas and the specific objectives.

MEMBER VELSHI: So more for presentation purposes and understanding this is -- this can be pretty confusing. As I look at it and I go really on this, there is no difference between the two other than the generic and specific plans.

So perhaps where there are significant differences you may want to just highlight those in the RD. It's a suggestion.

THE CHAIRMAN: Dr. Barriault?

MEMBER BARRIAULT: Thank you, Mr. Chairman.

On page 2 that says:

> *"Every licensee shall retain record referred to in paragraph 1D [which is a record of the training of the workers] for a period of three years."*

And I guess it begs the question why 3 Years, why not 4, why not 1?

MR. AWAD: Raoul Awad, for the record.

I think this requirement comes from the Code of Conduct. That the -- you have to refresh your staff at least every three years, this is an international accepted practice, but, you know, if they learn something or they have awareness in subject, three years later you have to remind them and you have to go through the cycle and give them the same level of knowledge.

MEMBER BARRIAULT: I guess, from a legal point of view, if I may, is there a requirement as to the amount of time that you have to keep records? I know medical ---

THE CHAIRMAN: (off mic) …taxation, I don't know why.

MEMBER BARRIAULT: Three or seven. Seven years, is it? Seven.

THE CHAIRMAN: (off mic) I think there's -- something about three.

MEMBER BARRIAULT: Okay. So, pourquoi?

MR. RÉGIMBALD: Dr. Barriault, this is in the *Nuclear Substances and Radiation Devices Regulation*.

MEMBER BARRIAULT: Yes.

MR. RÉGIMBALD: It's been there since the

passing of the regulation in 2000.

The three years, I presume, was deemed to be a reasonable period or based on some requirements, I don't know. I can't -- I don't remember at the time the exact reason. Three years after.

THE CHAIRMAN: But, it is now in regulations?

MR. RÉGIMBALD: Yes.

THE CHAIRMAN: Okay. So ---

MEMBER BARRIAULT: So, that's it, it's got to stay there.

THE CHAIRMAN: Right.

MEMBER BARRIAULT: Okay. Can't take it out. Okay.

The next question, really, at what point does your seal sources have to be registered? What I'm getting at is that, for example, can somebody smuggle them into the country and use them without registering them, much as you see with handguns and whatever?

Is there a mechanism for tracking these prior to registration to find out what happens if -- you know, the company produces them, can they sell them on the open market, whatever?

MR. RÉGIMBALD: Licensees who produce the sources are required by their license to report to the

CNSC within, I think, 48 hours.

Mr. Faille can confirm if I have the correct period. Must notify the Commission, the CNSC, 48 hours before sending the source to another licensee; they must check that the other person is a licensee of the CNSC, they must do some verification, inform us. And when the transport occurs, the receiver has to notify the CNSC within 24 hours or 48 hours -- I'll ask Mr. Faille to confirm ---

MEMBER BARRIAULT: Sorry ---

MR. RÉGIMBALD: --- and this is really in Canada.

For export, there are requirements for the licensees to have pre-approval from the receiving countries to make sure that there is a regulatory system in place in that country, there is a licensee duly recognized by the regulatory authority who can receive this.

So there are pre-notifications and exchanges and pre-approval before the actual transfer takes place.

I'll ask Mr. Faille to add details.

THE CHAIRMAN: Let's just simplify. There is no market, there is no kind of a thing, because you control the inventory of every source.

MEMBER BARRIAULT: Okay.

THE CHAIRMAN: In fact, if one of those Category 1, 2 and 3 are lost, it's a big ticket issue because it gets everybody involved.

MEMBER BARRIAULT: But that's assuming that it's been registered.

THE CHAIRMAN: It is registered. It's in the inventory of every licensee, every sealed source -- let me use specific; Nordion -- everything that Nordion owns is registered in our license.

MEMBER BARRIAULT: What's the penalty for violation?

MR. RÉGIMBALD: Under the existing Act, the Act allows us to apply a graded approach. So for such severe accident or incident, I should say, or event, we could issue an order to the licensee to undertake immediate measures to find the source and, you know, work with law enforcement authorities to find the source.

We can have severe measures to stop their operations until they find the source. We can suspend their license. So there are many measures that -- regulatory measures and options that we can take to address this violation.

And, under -- also, since last year, we can impose administrative monetary penalties -- penalties, I'm

sorry -- so this is the subject of the regulations, the proposed regulations have been published in Canada Gazette 1, so we are going through that. But eventually, it will be subject to issuance of an administrative monetary penalty.

MEMBER BARRIAULT: Thank you.

I appreciate your work you put into this. This is a nice document, so thank you very much.

That's all, Mr. Chairman.

THE CHAIRMAN: Dr. McDill?

MEMBER McDILL: We have had a couple of locations though when we had some issues with seal sources in -- I guess there was one in Alberta, is that right?

Not so much transportation, sources being taken out of the one holder and being put in another holder and that sort of thing. So, maybe just to expand a little bit on that for Dr. Barriault who may not have been on the Commission then?

THE CHAIRMAN: No, we do have issues with, normally, Category 3. Those are measurement devices, trucks run over them or they misuse it, that kind of a thing. I'm not aware of anything that we lost on Category 1 or 2, but…

MR. RÉGIMBALD: We have not had any events or incidents involving Categories 1 and 2 seal sources.

Perhaps, Mr. Faille can add details. Most of the incidents involved Category 4 sources which are the portable nuclear gauges and things like that or radiography equipment which is found just a few days after.

MR. FAILLE: Sylvain Faille.

Just to confirm what Mr. Régimbald said. For all the source that are remaining lost or stolen right now, we have a report that's posted on the CNSC website that outlines all of the incidents that have occurred and, at the moment, there is none that are in Category 1 or 2 sources.

So, all the -- I'm not aware of any source of Category 1 that have been missing. I know that there's a few Category 2 sources -- those are the ones that are used in the -- radiography, and at the moment, there's none of that that's not been recovered, as Mr. Régimbald said. Usually those are recovered very quickly after they're lost.

The one that are still in the public domain where -- they're not under regulatory controls are mostly Category 4 and 5 sources.

MR. AWAD: Raoul Awad, for the record.

If can add to this one. Each licensee should report immediately if he realizes that radioactive

sources is missing and he can report 24/7 to the duty officer at the CNSC.

THE CHAIRMAN: By the way, as an aside, the general public, when they find out that they may be some of those, even Category 4, are in their possession, get leery all by themselves; they may want to steal the truck, but they don't want the isotope that goes with it. So, normally we recover them relatively quickly.

I think I'm back to Dr. McDill.

Okay, monsieur Harvey?

MEMBER HARVEY: Merci, monsieur président.

On page -- your last slide, 25, the second bullet, that's security measures for sealed sources being compared to internal license conditions within the next two years for sites with high category. Why is it -- why it's done differently of the other?

I know it's more important, but is it because the license are longer than the bottom ones for -- because, in fact, what will be incorporated, because currently they do have the same obligations and…

MR. RÉGIMBALD: I'll ask Peter Fundarek to answer, please.

MR. FUNDAREK: Peter Fundarek, for the record.

The security measures that are currently in

use for the vast majority of the Category 1 and 2 sources, they're already in place and so we don't have any difficulty with ensuring that there's adequate security for those. And there's approximately about 250 of those licenses in existence right now.

The Category 4, 5 -- sorry -- 3, 4 and 5 sources represent approximately 2,000 licensees and so we already have in place, as part of the license application process, a mechanism for reviewing the license -- the licensee's intentions with respect to security.

We have a good liaison with Nuclear Security Division to ensure that there are robust reviews carried out in circumstances where necessary for the security of the sealed sources that the licensee intends to use.

And so it's our intentions -- since these licenses are numerous and we already have sufficient measures in place that as those licenses come up for renewal over the next few years, that's when we would be adding in the new license conditions for this, because we already have sufficient measures in place.

MEMBER HARVEY: No, I agree, that's okay for those sources but how are you going to -- I mean, for the other one you will just -- how you will do that? I mean, you will just correct the paper and send it to the

licensee or ---

MR. RÉGIMBALD: The -- the mechanism we will use is that since these licences are issued under the authority of a designated officer who is not authorized to amend on his or her own motion, then we will bring -- we will come forward to the Commission and request that the Commission amend those licences, those for Category 1 and 2, with the new set of conditions.

With the other ones, as Mr. Fundarek indicated, as they come up for renewal over the next three, four years, then the designated officer will -- will put the conditions in.

MEMBER HARVEY: Are the licence -- those licences for one and two, is it open-ended licence or is it fixed? What is the duration of the license?

MR. FUNDAREK: Peter Fundarek.

A number of them are long-term facility licences for Class 2 facilities; those can be up to 25 years. But those are for fixed facility locations. For the vast majority of the Category 2, which are industrial radiography sources, those are on five-year terms.

MEMBER HARVEY: Okay.

MR. RÉGIMBALD: The Class II facilities are medical facilities, hospitals and things -- like accelerators.

MEMBER HARVEY: Okay, I see why you do that. Okay. Thank you.

MEMBER TOLGYESI: What I understand that the licensee who is transporting his rules to follow in licensees in Canada. And if he's going overboard to U.S. or to Mexico, at least on Canadian soil he should -- he should -- how you call -- se conformer -- comply with Canadian rules.

What about if somebody's from Mexico is sending something, a device on transportation, how do you make sure that they comply with Canadian rules when they are coming? And how the select -- how they select the contractors, the subcontractors for transportation?

MR. AWAD: Raoul Awad, for the record.

According to our importation or the export and import regulation, this requirement apply when this radioactive sources will come to Canada. Then the same rule will apply and we will verify this by the pre-notification with the Mexican authority or American authority that they are complying with all our requirement.

THE CHAIRMAN: Okay, just for everybody to understand; they cannot import into Canada without a licence. So they have to actually have somebody here licensed receiving this Category 1 or 2. And maybe even -

- maybe even three, I don't know about their licence four. Where -- at what level is it a free market, free border?

MR. AWAD: There is no free border. Any radioactive sources require a licence --

THE CHAIRMAN: Including Category 5?

MR. AWAD: Including Category 5. But the Category 5 -- 4 and 5 are not issued by transaction, it's issued to the facility receiving this --

THE CHAIRMAN: So we control it at the license ---

MR. AWAD: We control it at the licensee level.

THE CHAIRMAN: Okay. Thank you.

MEMBER TOLGYESI: Just a -- is -- is this regulation similar from Canada to States and to Mexico or there are large variations so you know…

MR. AWAD: Raoul Awad, for the record.

Since the Code of Conduct is adopted by the majority of these countries, all this regulation are almost identical. Every country adopted the Code of Conduct have the same regulatory control.

MEMBER VELSHI: I have a couple of very quick questions on some of the feedback that you received.

One was around and -- and Dr. Binder asked about ensuring consistency between the different CNSC

regulations, but there was some question around Transport Canada and this particular regulation. And I think your disposition was that you were in discussions with Transport Canada to make sure it was seamless and -- and consistent.

So can you just confirm that that is indeed the case?

MR. AWAD: Raoul Awad, for the record.

In the developing of any regulatory requirement we consult with our stakeholders, particularly in this case Transport Canada.

And I will ask Mr. Sylvain Faille to add more to this answer.

MR. FAILLE: Sylvain Faille.

With Transport Canada in their regulations there -- they don’t have specific requirements for -- there’s no inconsistencies between what is required under this guidance and what would be in Transport Canada’s regulations themselves.

And perhaps Mr. Raphaël Duguay have more information since he was involved in discussion with Transport Canada on the specific security requirements.

MR. DUGUAY: Raphaël Duguay, for the record.

So just to provide some supplemental

information. We did consult Transport Canada in the -- in the developing of this document. We also looked at what was the requirement for transporting dangerous goods in Canada to make sure that we were aligned and that there was no duplication of requirements.

So that was the intent of our consultation. And I can tell you that there is no duplication today for that -- for those requirements that we're proposing.

MEMBER VELSHI: Excellent.

And the second one was a comment from someone on -- instead of -- you know, in detail this -- specifying what the Code of Conduct has, why not just make reference to it. I think that's how I read the comment.

So is this a stand-alone document or does the licensee have to look at the IAEA document as well?

MR. REGIMBALD: This is a -- this is a stand-alone -- this is a stand-alone document. The IAEA Code of Conduct is -- Canada is a signatory of the code and the CNSC is the regulatory body that applies -- you know -- the various provisions. So we control from the point of view of -- for the licensees. Okay. So that's -- that's how the control is ensured.

For this document -- the documents -- the requirements will be incorporated in licence conditions. And again the licensees will be required to comply with

these requirements, in addition to whatever requirements we have imposed on them with respect to the Code of Conduct, for example, tracking of sealed -- of Category 1 and 2 sources. Okay, so there -- there will be complementary requirements.

THE CHAIRMAN: Let me piggyback on this.

So if you want to make this document very, very user friendly and it's a judgement call, you -- you want to put as much information in this document so you don't have to go and chase another document to try to find out what to do.

So I was surprised on page 6 when you -- I thought it was an important critical calculation about designating the category, you have something, the AD ratio, and you send the reader to Tech Doc 1344, whatever -- wherever that is, for the actual calculation.

I actually wanted to see the calculation right here. I mean you put a table, you put a range, you give examples, but then I want to calculate the ratio and I can't find it.

Why is it not in here?

MR. AWAD: Raoul Awad, for the record.

I will ask Mr. Raphaël Duguay to answer this question.

THE CHAIRMAN: Okay.

MR. DUGUAY: Raphaël Duguay, for the record.

So we did try to do this document user friendly. And that we're trying to provide the licensee, but about what is the methodology that has to be implemented to calculate the threshold and also what are the use types.

We had many comments from the industry to help -- they were asking for more guidance. And -- and so we provide an Appendix C where we list all the different use types and what is their security level. So it helps them to identify what are the requirements that apply to them. And it's -- that's what is the intent.

And one of the other things is we not want to -- to copy or to repeat what was already in those IAEA documents. So that's why we referred the -- we made a reference of the documents without going into the specific details.

THE CHAIRMAN: I know, but that's my question. On this one it's a Canadian calculation based on some international standard. I thought that one you would -- you went to put in the actual range and they explain the range et cetera. They -- the ratio, the A over D, I thought should have been in the actual document.

Is reg 1344, reg doc easy to find?

MR. FAILLE: Yes, Sylvain Faille.

This document from the IEA is available electronically on their -- on their website and is -- it can be found very easily.

THE CHAIRMAN: In our regulatory document, when I click on can I click on this and get it down so I can find what A and D is?

MR. AWAD: Raoul Awad, for the record.

Actually when this document will be published in our website the word Tech Doc 144, it will be a hyperlink that will lead directly to IEA document.

THECHAIRMAN: Okay that's what I'm looking for. Thank you.

Any other questions?

No. I got a-- first of all, nice slides, nice colour slides I like those -- you should use some of them in your document, you know, particularly the pyramid with the levels, I think they are -- some of them -- you know, and some of the examples.

And remember that somewhere along the line the public should see whatever we cannot really do in the public.

It's interesting that today that they were talking about there's another movement -- you know they found E. coli in some meat a couple of days ago. And I

think now they're finally going to go to Health Canada and ask for authority to irradiate meat.

That's a category -- is that the same thing as Category 2 or 1 of the blood, is that the same irradiate that they use for blood?

MR. RÉGIMBALD: Mr. Fundarek can provide detail but the large sources for the irradiators I believe they're Category 1, and these would be to irradiate food products.

Mr. Fundarek please.

MR. FUNDAREK: Peter Fundarek

Yes that is correct. For the processing of foodstuffs for irradiation it would be through a Category 1 source and those are typically Class II facilities. And for the blood irradiators those would either be a Category 2 or -- typically would be Category 2 sources for these -- for the purposes of this document.

THE CHAIRMAN: They will all have to be licensed by us if the government decides to go that route.

MR. FUNDAREK: Peter Fundarek

Yes, all users of radioactive material in Canada require a licence from the CNSC.

THE CHAIRMAN: My last question is -- and this is kind of a bureaucratic question, between you two DGs, who is the lead on this file?

MR. AWAD: Actually having the two DG lead on this file that's a good example that there is no silo in the CNSC; we are working always together.

THE CHAIRMAN: That's a very nice try but there's always a lead.

MR. AWAD: From the licensing perspective, Andre Régimbald they will be responsible of integrating this requirement in the licence, putting the requirement in place and verifying if the licensee is comply with this license is always the licensing directorate.

THE CHAIRMAN: But there's a big security issue here, with Category 1 and 2.

MR. AWAD: It's a big security issue. Yeah. We are drafting this requirement but the application and the follow-up and the compliance with this requirement will be totally under the responsibility of my colleague, Andre Régimbald.

THE CHAIRMAN: You know that we are very sensitive to clarity about responsibility and accountability.

MR. RÉGIMBALD: Just to add to that, we have an internal administrative arrangements between our two groups where our inspectors, when they go out in the field, they have a list of things to verify. The list was provided by the Nuclear Security Division and inspectors

received training on what to look for and what to -- how to report things.

So the inspector’s report will then be fed back to the specialists in Mr. Awad’s group and if there are any measures to be taken then there is coordination between the two groups with respect to any corrective measures to be taken.

THE CHAIRMAN: Okay, thank you.

Any last word on this?

Thank you, thank you very much.

(SHORT PAUSE)

THE CHAIRMAN: I stand corrected here; this concludes the public meeting of the Commission.

Thank you all for your attendance and participation.

--- Upon adjourning at 12:19 p.m./

La réunion est ajournée à 12h19