Canadian Nuclear Safety Commission

Commission canadienne de sûreté nucléaire

Public meeting

Réunion publique

March 3rd, 2020

Le 3 mars 2020

Casa Do Alentejo
Community Centre
1130 Dupont Street
Toronto, Ontario

Centre Communautaire
Casa Do Alentejo
1130, rue Dupont
Toronto (Ontario)

Commission Members present

Commissaires présents

Ms Rumina Velshi
Dr. Sandor Demeter
Dr. Timothy Berube
Dr. Marcel Lacroix
Dr. Stephen McKinnon

Mme Rumina Velshi
Dr Sandor Demeter
M. Timothy Berube
M. Marcel Lacroix
M. Stephen McKinnon

Secretary:

Secrétaire:

Mr. Marc Leblanc

Me Marc Leblanc

Senior General Counsel:

Avocate-générale principale :

Ms. Lisa Thiele

Me Lisa Thiele

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Toronto, Ontario / Toronto (Ontario)

--- Upon commencing on Tuesday, March 3, 2020
at 5:40 p.m. / La réunion débute le
mardi 3 mars 2020 à 17 h 40

Opening Remarks

MR. LEBLANC: Good afternoon and welcome to the Commission meeting.

The *Nuclear Safety and Control Act* authorizes the Commission to hold meetings for the conduct of its business.

The meeting agenda was published on February 20th, 2020.

This will be a short meeting with one item to provide the members with an update on the status of the power reactors in Canada. This update is provided at every Commission proceeding.

Ms Velshi will preside over the meeting.

President Velshi...?

CMD 20-M2

Adoption of Agenda

THE PRESIDENT: With this information, I would now like to call for the adoption of the agenda by the Commission Members, as outlined in CMD 20-M2.

Do we have concurrence?

Okay. For the record, the agenda is adopted.

I wish to note that the Minutes of the November 6-7 Commission meetings were approved secretarially and will be available at a later date on the CNSC website.

The minutes of the December 11-12 Commission meeting will be approved secretarially in the coming weeks.

So let’s move to the Status Report on Power Reactors, as outlined in CMD 20-M5.

I believe we have representatives from the nuclear power plants and CNSC staff joining us via videoconference and Webex.

You can identify yourselves later, before you speak.

Mr. Frappier, do you have anything to add before I turn the floor to my colleagues for questions?

Mr. Frappier, are you there?

MR. FRAPPIER: Yes, I do, and thank you. Hopefully you can hear --

THE PRESIDENT: Very well.

MR. FRAPPIER: Yes, I'm here.

Can you hear me?

THE PRESIDENT: Very well, thank you. And we can see you, too.

CMD 20-M5

Status Report on Power Reactors

Submission from CNSC staff

MR. FRAPPIER: Great, thank you.

So good evening, Madam President and Members of the Commission. For the record, my name is Gerry Frappier and I am the Director General of the Directorate of Power Reactor Regulation.

With me today are other regulatory and technical managers and specialists. We also have licensee staff available for questions you may have.

The Status Report on Power Reactors, CMD 20-M5, was finalized on February 25th and I have the following updates that I would like to make.

For the Bruce site, I want to ensure there is clarity around the comments on the D20 spill. The cleanup of the spill resulted in no dose to the workers and no impact to the public or the environment. Also, we used the MPC_a unit. That might be unfamiliar for some folks, but it is equivalent to about 25 mSv an hour.

For Pickering, following completion of Pickering Unit 7 greylock repairs and post-maintenance testing for procedures, Unit 7 was returned to service. Unit 7 is now at about 98 percent of full power and is projected to return to full power later on tonight. CNSC staff continue to monitor the developments in this area.

Also at Pickering, as noted, there was an alert issued in error and the Ontario Solicitor General have completed their investigation into the emergency alert error. The investigation report and corrective actions have been posted on the Ontario Ministry of the Solicitor General's website.

As indicated in the CMD, an update will be provided to the Commission in April and at that time we can

have a more fulsome discussion on this and we will have provincial representatives at the meeting as well.

This concludes the Status Report on Power Reactors and we are available to answer any questions you may have.

THE PRESIDENT: Okay. Well, let me open the floor for questions from Commission Members. We will start with Dr. Lacroix.

MEMBER LACROIX: Thank you.

I do have two questions concerning the D20 spill at Bruce.

The first question is have you identified the origin of the spill? Does it come from the primary heat transport circuit or does it come from the calandria itself?

MR. FRAPPIER: Gerry Frappier, for the record.

I would like to ask Mr. Jeff Stevenson to provide some more information on that.

MR. STEVENSON: Jeff Stevenson, Senior Power Reactor Site Inspector, for the record. Can you hear me?

THE PRESIDENT: Yes, we can.

MR. STEVENSON: Thank you.

To respond to Commissioner Lacroix's question, the source of the water that was spilled was the primary heat transport circuit. This water is used to inject water into the fuelling machine when it's going through its fuelling sequence in the heat transport system.

MEMBER LACROIX: Okay. So it comes from the highly pressurized -- the pressurized site? That means that a pressure boundary was broken; am I correct?

MR. STEVENSON: Jeff Stevenson, for the record.

Yes, that is correct. The valves that were leaking, it was a drain-off line between some of the injection valves, but it is part of the pressurized circuit.

MEMBER LACROIX: So is it a common problem?

MR. FRAPPIER: Gerry Frappier, for the record.

I believe there are some representatives from Bruce Power and they would be in a better position to talk about the reliability of the associated valves.

MR. BURTON: Yes. It's Maury Burton, the

Senior Director of Regulatory Affairs from Bruce Power here.

I just want to provide some clarification. The incident in question happened during some post-maintenance testing on one of our flow injection valves, which Mr. Stevenson noted. We use that when we hook the fuelling machine on and it's really to ensure that we don't get debris coming back into the fuelling machine when we are online fuelling.

So in this case we had -- the system actually was drained and they were preparing to do some post-maintenance testing. However, due to an error in the clearance order, they were filling a fuelling machine in Unit 0 and it allowed a valve to open, which allowed water into the drain portion of the system, which leaked through this drain valve into the tent. Now, the drain valve was partially closed, but it wasn't fully closed, so we did have a small spill which was obviously cleaned up with no real impact.

MEMBER LACROIX: Okay, that's great. Now, I understand.

And my second question is a quick question. You mentioned the maximum permissible

concentration. Is this for tritium gas or tritium oxide?

MR. BURTON: Maury Burton, for the record.

It would be tritium vapour in air. So obviously --

MEMBER LACROIX: Okay, that's great. Thanks. Thanks a lot.

THE PRESIDENT: On that one, Mr. Burton, the note here says the local tritium concentration exceeded 1 MPC_a. Like how much did it exceed?

MR. BURTON: Maury Burton, for the record.

I do not have that information with me, but I can find that out.

THE PRESIDENT: Okay, that would be good. Thank you.

Dr. Berube...?

MR. STEVENSON: Jeff Stevenson, Site Inspector, for the record.

I actually have that information if you wish it.

THE PRESIDENT: Okay, Mr. Stevenson.

MR. STEVENSON: So right at the source of the spill the tritium concentration reached approximately 10 MPC_a. By the Zone 1 -- or the Zone 2 boundary, it was

approximately 5 MPC_a. And then between Unit 2 and Unit 0, which was the nearest nearby unit, it was approximately 2 MPC_a.

THE PRESIDENT: Thank you.

Dr. Berube...?

MEMBER BERUBE: Yes. My question has to do with Class 4 power transformer Unit 8. Has that been installed back in service at this point?

MR. BURTON: Maury Burton, for the record.

The transformer is in place and we are in the process of reconnecting it. One of the issues we had was there was some damage to some of the electrical components on the inside station when we had the power surge and we are waiting for those to arrive. Essentially it's the bus components that connect back into the station power source. So the transformer is onsite and in place, but we are waiting for some electrical components to get the commissioning in progress. We do expect it to be back in service mid to late April.

THE PRESIDENT: Dr. Demeter...?

MEMBER DEMETER: Thank you.

I had a question about the Pickering Unit 7 shutdown. Just the language I didn't quite understand.

It said a planned unbudgeted outage. Usually it's like an unplanned outage which is not budgeted, but a planned unbudgeted outage, I didn't understand the language, what that means, the significance of the unbudgeted qualifier.

MR. FRAPPIER: Gerry Frappier, for the record.

So that is terminology that is used by OPG, so perhaps I will let them provide a clearer definition of it.

MR. GEOFROY: It's Richard Geofroy, Director of Operations and Maintenance for the Pickering Nuclear Station. Can everyone hear me loud and clear?

THE PRESIDENT: Yes, we can.

MR. GEOFROY: So a planned unbudgeted outage for us means we anticipated the outage, we had approvals with the IESO to take the outage, so we saw this coming, but it was not part of our business plan to have this outage.

THE PRESIDENT: Thank you.

Dr. McKinnon...?

MEMBER McKINNON: Yes. I have a question about the spill that occurred at Bruce.

When I read about that, the emergency

alert error was going through my mind, so I'm curious about what is the chain of command at the site in terms of how many people are involved and if they are all present onsite. And if you could give me some idea on the timeline of the incident, like the response time for that chain of command to take place.

MR. BURTON: Maury Burton, for the record.

In this particular incident we did not stand up our ERO. What we do have based on a couple of events we had in the past where people took unnecessary dose, we do declare a station emergency for accounting purposes. This causes all workers to go to an accounting area for accounting and gets them out of the incident area so that we can get our response teams in in proper protective equipment to do the cleanup.

So in this particular case, the Shift Manager would be the person in command and he is onsite all the time -- or we have a Duty Shift Manager onsite all the time and our Emergency Operations Centre in the Control Room would have been stood up, which has approximately five people.

If it was a bigger emergency and we stood up the ERO, there is approximately another 10 folks that

come in and staff our Emergency Management Centre, in which case they would take over command and the Duty Commander would take control of the event, although the Shift Manager still has control in the plant because he is the certified person for that.

Does that answer your question?

MEMBER McKINNON: Yes, thank you.

THE PRESIDENT: I have two quick questions.

One: Both the Bruce 4 and the Pickering 1 planned maintenance outages seem to be of rather long duration, one is 3 1/2 months and one is five months. What is the scope for those outages to require such a long outage?

MR. BURTON: Maury Burton, for the record. I will answer for the Bruce Unit 4 outage.

For Bruce Unit 4, the big impact on the scope is what we call SLR, which is spring location and relocation, which is moving the garter springs in the pressure tube that separate the pressure tubes and calandria tubes into optimized positions to ensure that we don't get contact between the pressure tube and calandria tube. So that is about -- I believe about 80 days of the

outage there of 114.

THE PRESIDENT: Thank you.

And Pickering...?

MR. GEOFROY: Richard Geofroy, for the record, at Pickering.

So similarly, most of the critical path for the outage is through pressure tube related inspections and channel repositioning, so all channel-related activities.

THE PRESIDENT: Okay, thank you.

And, Ms Morton, if you are on the line, I had a quick question around the low- and intermediate-level DGR and the SON referendum and really more to get an indication of if and when you were going to be withdrawing your licence application.

--- Pause

THE PRESIDENT: Is Ms Morton on the line?

--- Technical difficulties /

Difficultés techniques

THE PRESIDENT: If not, maybe someone from OPG can take that action and get back to us.

Ms Tadros...?

MR. ARODA: Hello, can you hear me?

THE PRESIDENT: Yes, we can.

MR. ARODA: This is Ricky Aroda, for the record.

I can follow up with Lise Morton on this and follow up with staff.

MS MORTON: Hello, it's Lise Morton. I apologize, I am having audio trouble.

THE PRESIDENT: We can hear you now.

--- Technical difficulties /
Difficultés techniques

THE PRESIDENT: Ms Tadros...?

MS TADROS: Yes. Haidy Tadros, for the record.

So maybe Ms Morton can confirm the points that I am about to lay out.

So we haven't yet received a formal letter from OPG withdrawing their application, but we are of the understanding that a letter is being put together. We anticipate the letter to be ready sometime in the month of May withdrawing the application for the current plan for the deep geological repository.

On top of that, as per OPG's regulatory requirements to report annually on their adequacy of their

financial guarantee fund, we have sent OPG a letter requesting an update as to what their plans are. In my understanding, just this week OPG has provided us with statements that OPG is looking into other plans and that they will take the opportunity to provide an update at the next financial guarantee hearing, which is anticipated to be in 2022, and they will speak to their new reference plan that will be submitted reflecting the latest major planning assumptions and economic factors at this time.

We also have identified, as per OPG's letter, a statement indicating that as of January 1st of this year that the update on their financial guarantee indicates that the financial guarantee fund has increased by approximately $2.9 billion, which is an increase of what is currently required. What is currently required is $17.8 billion and it is now at $20.7 billion. So the statement that OPG provides explains very well that they believe the estimates that are in the financial guarantee are still valid and they will be providing a more fulsome update on the plan with a financial guarantee on the economics by 2022 to the Commission.

THE PRESIDENT: Thank you very much.

Anyone with any other further --

Dr. Demeter...?

MEMBER DEMETER: Thank you.

Again for Unit 7 Pickering, the planned unbudgeted outage to undertake repairs of a small leakage from the primary system, did that leakage result in the release of any radioactive materials for Pickering?

MR. ARODA: Ricky Aroda, for the record.

So no release of radioactive materials to the environment. Everything, all leakage contained within the containment and processed accordingly.

MEMBER DEMETER: Okay. Thank you.

THE PRESIDENT: Okay. Well, thank you. This concludes the meeting of the Commission. Thank you all for making the time late this evening. Thank you.

--- Whereupon the meeting concluded at 6:00 p.m. /

La réunion est terminée à 18 h 00