

**Canadian Nuclear
Safety Commission**

**Commission canadienne de
sûreté nucléaire**

Public Meeting

Réunion publique

April 26, 2006

Le 26 avril 2006

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

Mr. Alan R. Graham
Dr. Christopher R. Barnes
Dr. Moyra McDill
Dr. James Dosman

M. Alan R. Graham
Dr. Christopher R. Barnes
Dr. Moyra McDill
Dr. James Dosman

Secretary: Mr. Marc A. Leblanc

Secrétaire: M. Marc A. Leblanc

General Counsel : Jacques Lavoie

Conseil général : Jacques Lavoie

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Ottawa, Ontario

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2
3 --- Upon commencing on Wednesday, April 26, 2006
4 at 3:02 p.m.

5 **06-M1**

6 **Opening Remarks**

7 **MR. LEBLANC:** Bon après-midi, mesdames et
8 messieurs. Bienvenu à la Commission canadienne de sûreté
9 nucléaire.

10 Mon nom est Marc Leblanc. Je suis
11 secrétaire de la Commission et j'aimerais aborder
12 certains aspects touchant le déroulement de cette réunion.

13 We have simultaneous translation. If you
14 would, please keep the pace of speech relatively slow so
15 the translators have a chance of keeping up. Des
16 appareils de traduction sont disponibles à la réception.
17 La version française est au poste 8 and the English
18 version is on Channel 7.

19 Please identify yourselves clearly before
20 speaking so that the transcripts are as complete and clear
21 as possible.

22 Les transcriptions seront disponibles sur
23 le site web de la Commission la semaine prochaine.

24 Please silence your cell phones.

1 Monsieur Graham présidera la réunion
2 publique d'aujourd'hui.

3 Mr. Chair.

4 **THE CHAIRPERSON:** Thank you very much and
5 good afternoon. Welcome to a meeting of the Canadian
6 Nuclear Safety Commission.

7 I also wish to welcome the participants
8 that are joining us via videoconferencing in Saskatoon.

9 I am Alan Graham and I will preside this
10 meeting in the absence of Linda Keen, who is unfortunately
11 unable to be with us today.

12 I would like to introduce the Members of
13 the Commission that here today. On my right, I would
14 start with Dr. Moyra McDill and Dr. Barnes and on my left,
15 Dr. Dosman. In addition to Mr. Leblanc, the Secretary of
16 the Commission, Mr. Jacques Lavoie, General Counsel to the
17 Commission is also with us today.

18 The Commission is still on enhanced
19 security status, as are many of the facilities which we
20 regulate and as such, I will, as appropriate, take
21 measures to ensure that security matters of a sensitive
22 nature are not discussed in public and we will, if
23 necessary, move in camera, closed session, at any time for
24 discussions of security matters.

25 Before adopting the agenda, I would like to

1 note that one supplementary Commission Member Document, or
2 CMD, was added to the agenda after its publication on
3 April 12, 2006.

4 With this information, I would like to call
5 for the adoption of the agenda by the Commission Members
6 as outlined in CMD 06-M19.A.

7 Do I have concurrence.

8
9 **06-M19 / 06-M19.A**

10 **Adoption of Agenda**

11 **THE CHAIRPERSON:** For the record, the
12 agenda is adopted.

13 **06-M20**

14 **Approval of Minutes**

15 **of Commission Meeting held March 30, 2006**

16 **THE CHAIRPERSON:** I will now call for
17 approval of the minutes of the Commission meeting on March
18 30, 2006. The minutes are outlined in Commission Member
19 Document CMD 06-M20.

20 I note that there are no follow-up updates
21 from the March 30th, 2006 meeting for today.

22 Are there any comments, additions or
23 deletions that Commission Members wish to make to the
24 draft minutes?

25 I note that there are no changes.

1 Therefore, I would ask the Commission Members to approve
2 the adoption of the minutes. Do we have approval?

3 Agreed. Thank you.

4 We will now move to the Significant
5 Development Reports as outlined in CMDs 06-M21 and 06-
6 M21.A.

7 As the Significant Development Reports are
8 already in written form, senior CNSC staff will first be
9 asked if they wish to add anything orally with respect to
10 each significant development report within their
11 perspective areas of responsibility, after which Members
12 will be asked if they have any questions.

13 We have today four Significant Development
14 Reports.

15 I should ask, first of all, is there
16 anything you wish to add -- that staff wish to add?

17 **MR. HOWDEN:** To the best of my knowledge,
18 there are no further SDRs to be added.

19 **THE CHAIRPERSON:** Thank you.

20 We have today four Significant Development
21 Reports which are under the responsibility of Mr. Barclay
22 Howden, Director General, Directorate of Nuclear Cycle and
23 Facilities Regulation.

24 The first one is item 4.1.1. is as follows,
25 and it's following the update of mine personnel exposure

1 to gases released from underground blasting at Cameco
2 Cigar Lake Operation. This item was first presented to
3 the Commission on February 16th, 2006.

4 Mr. Howden, any additional comments on this
5 item?

6
7 **06-M21**

8 **Significant Development Report No. 2006-3**

9 **MR. HOWDEN:** Thank you, Mr. Chair.

10 No further comments from staff. I would
11 like to note that Mr. Scissons, the Director of the
12 Uranium Mines and Mills Division is available in Saskatoon
13 to assist me in responding to questions.

14 Thank you.

15 **THE CHAIRPERSON:** Any questions or comments
16 from Commission Members with regard to the SDR on this
17 item?

18 Dr. Dosman.

19 **MEMBER DOSMAN:** Mr. Chair, I would like to
20 ask a question concerning the monitoring system for the
21 fan installations underground and on the other items
22 listed in the report.

23 I wonder if it would be possible to ask
24 CNSC staff more detail concerning these fan installations?
25 Why were they not in place previously and now that they're

1 installed, how are they working and so on?

2 **MR. HOWDEN:** Thank you. Barclay Howden
3 speaking.

4 I'm going to ask Mr. Kevin Scissons in
5 Saskatoon to reply to that, Dr. Dosman.

6 **MEMBER DOSMAN:** Thank you.

7 **THE CHAIRPERSON:** Do we have sound, audio
8 and visual both with Saskatoon?

9 We will just take a moment to rectify this.

10 Also, I should note that Mr. Jarrell is
11 here today also with us and here to answer questions. If
12 Mr. Jarrell would like to come up and join us, he may have
13 some questions he might want to answer also.

14 **(SHORT PAUSE)**

15 **MR. SCISSONS:** Can you hear us now?

16 **THE CHAIRPERSON:** Yes, we can.

17 So, Mr. Scissons, would you like to
18 proceed?

19 **MR. SCISSONS:** Yes. Good afternoon. Kevin
20 Scissons, Director of Uranium Mines and Mills Division in
21 Saskatoon.

22 With me I have the Project Officer, Denis
23 Schryer, and if I could ask Mr. Schryer to speak to the
24 specifics of the questions raised by Dr. Dosman.

25 Mr. Schryer.

1 **MR. SCHRYER:** Denis Schryer for the record.
2 Thank you for the question.

3 There were two fan installations that were
4 identified as critical, one as per the Significant
5 Development Report, that was the cause or the problematic
6 fan on the 500 level is now being monitored at the shaft
7 station using a light system, and another installation is
8 for radiation protection control is where we're currently
9 storing drill cuttings from the diamond drilling
10 operation.

11 Both installations are being monitored at
12 the shaft station with the use of lights.

13 In addition to that, the radiation
14 monitoring aspects for the drill cutting system is also
15 monitored by a radiation monitoring device.

16 The 500 level system and others may not
17 have been indicated as critical fans until this recent
18 incident occurred at the 500 level, and as these
19 installations become installed, judgments will be made to
20 ensure that the remaining critical fans are monitored.

21 **MEMBER DOSMAN:** Thank you.

22 Mr. Jarrell, would you like to add anything
23 to this?

24 **MR. JARRELL:** John Jarrell for the record.
25 No, I don't think so. I think probably we

1 look at it in the context of the Swiss construction
2 activity. So I think in hindsight, obviously, yes, this
3 was a critical fan and changes were made.

4 I could ask Barry Schmitke if he has any
5 specific comments to make.

6 **MR. SCHMITKE:** Barry Schmitke for the
7 record. No real significant comments other than that as
8 part of the ongoing construction and of course as we move
9 into operations, we will have suitable networks
10 underground, such as the fibre optics network, where we
11 will be connecting all the fans into the overall
12 monitoring of the health of the ventilation system
13 underground. Just for clarification.

14 **THE CHAIRPERSON:** Dr. Dosman.

15 **MEMBER DOSMAN:** I'm just wondering, for Mr.
16 Jarrell or perhaps staff, whether this brings up the
17 question of adequate training in health and safety
18 procedures for contractors onsite.

19 **MR. JARRELL:** Yes, John Jarrell, for the
20 record.

21 Yes, it did. In fact that was certainly
22 one of the take-aways from the root cause analysis we did,
23 was the need for additional training of ventilation
24 officers and verification of that training. So yes,
25 absolutely that was a key component of the corrective

1 implemented the day that we left the action item from our
2 inspection on December the 1st. The procedure involves a
3 trained mine rescue person accompanying the ventilation
4 officer. The procedure is implemented after every blast
5 is initiated and the mine is cleared in sequence, the
6 south end first and subsequent to that, the north end.

7 To the best of my knowledge, the procedure
8 has been effective and that it's being well-received by
9 the workers.

10 **MEMBER DOSMAN:** Thank you. I don't know if
11 Mr. Jarrell would like to comment on that matter, Mr.
12 Chair.

13 **MR. JARRELL:** Just broadly. It's John
14 Jarrell, for the record.

15 I'd like to point out that I think the
16 whole area of training for a new facility, certainly is a
17 pretty critical part going forward and certainly one on a
18 corporate level and on a site level, we view the whole
19 sort of training effort, both ventilation officers, miners
20 and all people that are going to work in the operating
21 phase, as a critical component going forward and there's
22 actually been a fair amount of priority put on that, is
23 looking at sort of the implementation of I think what you
24 commonly hear, the term "systematic approach to training".

25 So I think, as we advance this project, I

1 think you're going to hear an awful lot more from us about
2 the whole area of training and sort of readiness review.

3 **MEMBER DOSMAN:** Thank you.

4 **THE CHAIRPERSON:** Any other Commission
5 questions? If not, then we'll proceed to 4.1.5, Cigar
6 Lake project, Number 2 Shaft Flooding, which is a new
7 item.

8 This item is concerning the flooding of
9 Shaft Number 2 at Cigar Lake. Mr. Howden, have you any
10 comments on this item?

11 **MR. HOWDEN:** Thank you, Mr. Chair.

12 Yes, I do. I would like to make a few
13 introductory remarks if I may. Thank you.

14 First of all, to support in this SDR, I
15 have Mr. Scissons and Mr. Schryer in Saskatoon and Mr.
16 Flavelle, a geo-scientist, here in Ottawa.

17 To begin, my understanding is that Mr.
18 Jarrell will be able to supply further details on the
19 event and their planned path forward, so I will not
20 discuss that. What I would like to do, is provide
21 additional regulatory context surrounding the sinking of
22 the shaft and the construction of this mine.

23 During the hearings in 2004, there were
24 extensive discussions on ground control and the potential
25 for groundwater inflow to the mine, including the sinking

1 of number 2 shaft. At that time, the Commission indicated
2 the need for ongoing close monitoring and assessment.
3 From a regulatory perspective, CNSC has been doing this
4 and I'd like to give you just a couple of points.

5 As indicated in the SDR, Cameco has sunk
6 the shaft in stages using standard methods to detect and
7 mitigate water inflow. And at the 392 metre level, the
8 grouting operations continued for a very long period of
9 time. Our primary concerns that were discussed with
10 Cameco prior to this event, were the integrity of the
11 standpipe, given the length of time that the work was
12 taking, and confirmation of contingency plans.

13 In this particular case, contingency plans
14 being moving workers out of the shaft and allowing the
15 shaft to fill to natural levels.

16 When the event occurred, the licensee
17 implemented the contingency plans quickly and safely.
18 Monitoring indicates no health, safety or radiation
19 protection issues arose. So we are satisfied with these
20 actions.

21 Since this is an SDR, we don't have all the
22 information because we wanted to provide the info to you
23 in a timely manner, but we are expecting a root cause
24 assessment of this event, for lessons learned and we
25 expect that any path forward proposed by Cameco will be

1 risk-informed and will go through the joint regulatory
2 group review process of the CNSC and the other regulators
3 we work with.

4 From a slightly broader perspective, there
5 have been issues at this facility that have raised our
6 concerns, one being the subject of the SDR we just
7 discussed and regulatory actions were taken to address
8 those concerns. Our focus remains on the programs needed
9 for safe operations and the underlying processes needed to
10 assess and manage the risks on a continual basis. That
11 includes examining the linkages from this shaft sinking
12 work to the underground workings for developing the
13 infrastructure, to the preparations for the mining.

14 That concludes my opening statement and
15 staff is prepared to respond to any questions that you may
16 have. Thank you.

17 **THE CHAIRPERSON:** Before we do, Mr.
18 Jarrell, do you have any comments?

19 **MR. JARRELL:** Mr. Chairman, I have a few
20 slides that I could show, just to provide some additional
21 background, if you wish.

22 **THE CHAIRPERSON:** Yes, proceed.

23 **MR. JARRELL:** Okay.

24 Thank you. For the transcript record, my
25 name is John Jarrell. I am Cameco's Vice President,

1 Safety, Health and Environment. I am joined here today,
2 actually in Saskatoon, by Barry Schmitke, who is the
3 General Manager of the Cigar Lake project. We're here
4 today, to provide some additional information, hopefully
5 answer some questions.

6 You may recall from past presentations that
7 the Cigar Lake ore deposit is horizontal in nature, and is
8 accessed from below the deposit. The ore will be frozen,
9 prior to extraction in order to control water migration
10 into the mine.

11 There is currently single shaft access to
12 the mine and we are in the process of creating a second
13 access shaft. This second shaft is located in the ore
14 processing area and is further removed from the ore body
15 than the original shaft.

16 The mining method to create the second
17 shaft is the same as used in the first shaft, as well as
18 in the construction of the three McArthur River shafts.
19 It could be called a probe and grout method whereby the
20 ground below the shaft is probed for ground and water
21 conditions, grouted off with cement and then mined out.
22 The shaft liner is then extended to the new depth. The
23 cycle is typically a 40 meter grout cover with 30 meters
24 advance before the cycle is repeated.

25 What we have produced here is a sketch just

1 to give a sense of what was happening on April the 5th.
2 There are, you'll note, two shafts that are 100 meters
3 apart. We were on the eighth of a planned ten-grout cover
4 program. Ground conditions, I would say are generally
5 more problematic near the unconformity at depth. I would
6 point out however, that the shaft pilot hole did not
7 detect this level of a problem before we started the shaft
8 sinking.

9 At the time of the incident, we were about
10 50 metres from the basement rock interface and about 90
11 metres from breakthrough to the mine, at the point of the
12 problem.

13 As Mr. Howden noted, the shaft was refilled
14 to natural groundwater levels of approximately 27 metres
15 below ground surface. We estimate that about 2 metres of
16 sand was deposited in the shaft bottom from the inflow
17 event.

18 This had been a particularly difficult
19 grout cover, which had been taking place for approximately
20 four months. And in fact, at the time of the event we
21 were thinking of moving on to the next step, which is
22 typically to freeze the surrounding ground and then put a
23 hydrostatic liner through the problem area. This
24 technology has been used elsewhere in Saskatchewan. It's
25 been used in the potash industry.

1 Both shaft 1 and 2, I should point out use
2 this technique of ground freezing and hydrostatic liner,
3 particularly at the top of the shaft through the over-
4 burden.

5 I should also point out that ground
6 freezing is extensively used both at McArthur River and
7 Cigar Lake for ore body preparation. Our current thinking
8 is that the most likely step is that of ground freezing
9 from below, but we are still completing the analysis.

10 At the time of the incident, we had
11 injected about 900,000 kilograms of cement. We had
12 estimated that we had refilled about one-half of the
13 material removed from the formation in the process of
14 flushing it out, flushing out the grout holes in order to
15 take the cement.

16 For a perspective on distance, this sketch
17 shows the width of the shaft which is 6.1 metres. The
18 valve on hole 7-D failed. This is the third line from the
19 top at about 45 degrees angle from the right on this
20 drawing. The hole which failed was generally on the side
21 away from the shaft, away from shaft 1 and away from the
22 ore body. We were working on hole 7-E which was the one
23 above hole 7-D in this drawing at the time of the
24 incident.

25 When we were here requesting a construction

1 licence, we were asked what shaft 2 would look like. It
2 is obviously not outfitted yet but this photo shows how
3 the shaft looks in the construction from the top of the
4 shaft.

5 This picture is taken mid-way through the
6 shaft sinking that's been done to date. It shows the
7 process of drilling a grout hole through the valve and
8 standpipe arrangement on top of the hole. The standpipe
9 is cemented into place and pressure tested before drilling
10 into un-grouted ground. The valve in this photo shows up
11 here as yellow.

12 This is another picture again mid-way
13 through the work showing drilling work through the valve
14 and standpipe. I'd also note the presence of the concrete
15 liner on the walls of the shaft at this particular stage
16 of the cycle.

17 Here's another picture of grout pipes.
18 This time four of them are showing in the photograph with
19 the drill attached to one of the pipes. Note that the
20 valves are placed in close proximity to the ground and I'd
21 also note that the shaft is not lined in this picture.

22 Here's a close-up picture of a typical
23 valve and standpipe arrangement. And here's a close-up of
24 the valve which was placed onto the grout hole when it's
25 in active use. It's a two-inch split-bodied gate valve

1 with threaded connections. The valve stem and stem
2 packing are at the top of the valve.

3 The valve itself weighs about 50 to 60
4 pounds and has to be removed periodically from the hole to
5 clear it of hard cement, hence the selection of a split-
6 bodied design which is secured in placed with four large
7 studs.

8 Here's a picture of the valve and standpipe
9 assembly with a threaded coupling between the nut that's
10 welded on the end of the pipe and the valve itself. We do
11 not yet know how this valve came off the pipe. It could
12 be a thread issue. It could be a failure of the
13 standpipe, the coupling or the valve itself.

14 A sample of the standpipe has been sent out
15 for metallurgical testing but we do not yet have the
16 results. It is also quite possible that once we get down
17 into the shaft again we will find the failed piece and
18 finally be able to definitively answer the question on
19 failure mechanism. Regardless of the cause of the
20 failure, we are near the end of shaft completion and need
21 to get on with the job of finding an acceptable
22 alternative way to complete the shaft.

23 As indicated earlier, our thoughts prior to
24 the event were leaning towards ground freezing in the
25 remaining zone between the base of the shaft and the

1 underground workings. This remains the likely solution.
2 We need to complete our analysis and complete a third-
3 party expert review of the selected option. Once that is
4 done, we will be in a position to approach CNSC staff with
5 a proposal to move forward. Once we have technical
6 acceptance, we would then implement the solution, pump out
7 the shaft, verify water control and then complete the
8 shaft through to completion.

9 We'd be happy to answer any questions you
10 may have at this point. Thank you.

11 **THE CHAIRPERSON:** Does the Saskatoon office
12 have any comments?

13 **MR. SCHMITKE:** No comments from Saskatoon.

14 **THE CHAIRPERSON:** The floor now is open to
15 Commission Members.

16 Dr. Barnes?

17 **MEMBER BARNES:** I have several questions
18 and also some concerns. In fact, I got hold of the
19 transcripts from our previous meeting and all the
20 documents because -- and reminded myself that we'd had
21 this extensive discussion. I think all members expressed
22 varying degrees of potential concern with this.

23 And just speaking for myself, I felt that
24 some of the assumptions on the hydro-geologic regime that
25 was being put forward by Cameco were being presented in a

1 somewhat simplistic fashion. A member made these comments
2 at the time, the kind of modelling, whether you had the
3 right kind of drilling information. Most of the drill
4 holes were somewhat distant from the zone of
5 mineralization, et cetera. The modelling was based on a
6 porous media flow regime which almost certainly isn't when
7 you get into these problematical areas.

8 When you've come before us before, you
9 typically characterized the Athabasca sandstone as being
10 one that there's not a high degree of flow within it.
11 Some fracture flow, but typically the problem as you
12 indicated at the outset is usually associated with the
13 "poor ground conditions" around the unconformity where the
14 mineralization is and so on.

15 So I think it is of concern to see this
16 level of water influx at a level that is 50 metres above
17 the unconformity, for one. Now, maybe what you're saying
18 is that the rate of water flow and the pressure at that
19 level is not unexpected. It was just that the valve
20 failed and essentially you had flooding that you couldn't
21 control.

22 So my first question is, is that the right
23 interpretation? Why couldn't you control the water flow
24 coming in?

25 **MR. JARRELL:** John Jarrell for the record.

1 I'll offer two comments and then I'll turn
2 to Barry Schmitke.

3 The comment I make is, first of all, as far
4 as the flow rate goes, it's still substantially less than
5 -- the line obviously turns parallel to McArthur River,
6 substantially lower than that. The flow rate was -- there
7 were two thoughts through our mind. One is certainly the
8 ability to pump the thing and then what you do if you did
9 pump it out. Is it possible to recover that shaft?

10 The assessment that we did essentially was
11 one that rather than take the approach of trying to pump
12 it out, that we'd let the thing inflow and then sort of
13 set back from this and take a look at what was the best
14 systematic approach to deal with this event.

15 I think what our mind was turning more not
16 so much was the volume of water but what would we do if we
17 kept it empty. Like what was the resolution mechanism?
18 As I indicated in the presentation we gave, our thinking
19 at the time even was turning towards freezing. So I think
20 that was probably the bigger motivator than just trying to
21 keep the thing dry, but I'll ask Barry. Barry can perhaps
22 give you sort of a sense of the pump capacities we had and
23 what our options were at the time the event occurred.

24 **THE CHAIRPERSON:** Mr. Schmitke, would you
25 like to comment?

1 **MR. SCHMITKE:** Barry Schmitke for the
2 record.

3 Certainly when the event occurred, our
4 pumping rate from the shaft was about 350 cubic metres per
5 hour. The unfortunate thing is right at the shaft bottom,
6 when we encountered the inflow, of course we have to do a
7 number of things and once we have to start moving the
8 Galloway, which is a stage you saw in one of the pictures,
9 away from the shaft bottom, then we have to turn off the
10 pumps to be able to do that. And then we would go higher
11 up into the shaft and sort of establish the pump station
12 with the full pumping capacity. And certainly we are
13 prepared to do that but we wanted to evaluate what would
14 be sort of the longer term approach to the resolution.

15 And water under this pressure, if you're
16 down there and you open up a valve when you're flushing
17 the grout holes, the water is under a significant amount
18 of pressure and it's shooting up into the air without
19 control of course. Being there, it would shoot up into
20 the air something like seven to nine metres. So it's not
21 an insignificant event when you're down there trying to
22 control it.

23 As far as a mechanism to control that sort
24 of thing when it breaks, I really haven't encountered one
25 and I really don't know of one that's been utilized in

1 shaft sinking. Certainly if it's a relatively small flow,
2 then you can take and push something into the hole to
3 restrict the flow, but unfortunately when it's a very
4 large flow and under significant pressure, then that
5 becomes very problematic. And of course, then you have
6 the safety issues that go along with that.

7 **MEMBER BARNES:** Okay. Maybe I'll come back
8 to that.

9 One thing I don't understand is that in the
10 written report -- you're going down -- this is the eighth
11 stage out of 10, and in the written document under 2.0,
12 the second paragraph, you say:

13 "Prior to sinking through a grout-
14 covered section..."

15 So in section number 8, this is about the sixth line in
16 the second paragraph 2.0:

17 "Prior to sinking through a grout-
18 covered section, a minimum of four
19 probe holes are drilled to determine
20 the presence of potential volume of
21 water."

22 And, Mr. Jarrell, you mentioned there was
23 one probe hole.

24 So, first of all, how many probe holes were
25 there? Why had not this interval been recognized? The

1 fact that you're pumping or having to pump 900,000
2 kilograms of grout over four and a half months must tell
3 us something about, again, some rather curious lithologies
4 down there, right?

5 So from a geological viewpoint, why is that
6 particular -- what has happened to the formation at that
7 particular interval and why didn't the probe holes pick
8 that up?

9 **MR. JARRELL:** John Jarrell for the record.

10 I must apologize. I think I've confused
11 you. I was referring to an initial pilot hole that was
12 put down prior to the sinking of the shaft and that was
13 separate from sort of the probe holes for each stage.

14 So my apologies if I've misinterpreted
15 that.

16 As far as the number of probe holes, I
17 think it's a function of the ground conditions. I'll ask
18 Barry to sort of lay the stage as to what was happening at
19 that particular grout cover number 8, if I could.

20 **MR. SCHMITKE:** Barry Schmitke for the
21 record.

22 The hole from surface is actually a
23 geotechnical hole as what Mr. Jarrell indicated, and it's
24 meant to test the geotechnical conditions of the ground
25 for the shaft sinking. There's a number of geotechnical

1 tests that are done on that hole as well as testing on the
2 core and things like that.

3 For each of the grout covers, what we do is
4 we establish a minimum of four holes to test for water.
5 We don't actually test for geotechnical conditions so much
6 other than the fact of when we hit a zone that's really
7 soft, we can tell with a drill, but there's no core taken
8 to do that sort of evaluation other than just the
9 performance of the drill itself.

10 So in this particular case, we had
11 indications from probe hole number 7 -- and I can't
12 remember the exact number of holes that we had in probe
13 hole number 7, but it probably was in the neighbourhood of
14 about 25 holes -- that there was additional water and poor
15 ground conditions as we proceeded down.

16 So when we got into grout cover number 8,
17 we drilled a total of 33 holes and four of them were the
18 centre holes that we continued to test. After we did some
19 grouting, we re-drilled those four initial holes -- or
20 four holes sort of around the centre of the shaft to
21 determine the effect of the grout cover. And obviously,
22 if the grout cover is not satisfactory, as was in this
23 case, we continued to add additional grouting holes.

24 **MEMBER BARNES:** So on the drilling, you're
25 not taking cores as such? At no time in these are you

1 trying to take cores to understand the nature of the
2 lithology?

3 **MR. SCHMITKE:** Barry Schmitke.

4 That's correct; we do not take cores during
5 the grout covers.

6 **MEMBER BARNES:** Even when you're there for
7 four and a half months pumping nearly a million tonnes of
8 concrete into a lithology you don't understand, it's not
9 worth taking a core?

10 **MR. SCHMITKE:** Barry Schmitke for the
11 record.

12 The core would certainly tell us that we
13 have a problematic area, but we would continue on grouting
14 until we felt that going to the next step, which is ground
15 freezing, would be the appropriate method, and that's
16 where we were at with this particular grout cover.

17 **MEMBER BARNES:** And you're at the 392-metre
18 level. You've still got another 50 metres to go through
19 the Athabasca sandstone until you get to the end
20 conformity and to the zone of mineralization. So
21 potentially you've got another 50 metres of potential
22 difficult rock to get through.

23 Is that right?

24 **MR. SCHMITKE:** Barry Schmitke.

25 That is the correct assessment.

1 **MEMBER BARNES:** And how far away was the
2 so-called pilot hole from Shaft Number 2?

3 **MR. SCHMITKE:** Barry Schmitke.

4 The pilot hole for Shaft No. 2 was collared
5 in the centre of the shaft and, of course, there was some
6 deviation by the time it reached the 392-metre level. So
7 it was probably off the centre maybe about two or three
8 metres.

9 **MEMBER BARNES:** But even at two or three
10 metres, given that you're pumping 900,000 kilograms of
11 grout, this area of high permeability and high water flow
12 must extend some distance away from the shaft, wouldn't
13 you think?

14 **MR. SCHMITKE:** Unfortunately, we don't have
15 additional holes there to say that, but I would say your
16 assessment is probably correct.

17 **MEMBER BARNES:** I mean, you've got to put
18 900,000 kilograms of concrete somewhere. Volumetrically,
19 it's got to be some distance from the shaft.

20 **MR. SCHMITKE:** Barry Schmitke for the
21 record.

22 I think there's two things. One, it would
23 flow some distance from the shaft. Plus, there are a lot
24 of fractures that potentially maybe don't have material in
25 them or water which are also filling up with the cement.

1 **MEMBER BARNES:** Given that ultimately --
2 well, let me just ask another question. I guess the pumps
3 that you're using here, are they the size and volume of
4 the pumps that you had planned originally to install at
5 the bottom of Shaft Number 2 when it was in operation?

6 **MR. SCHMITKE:** Barry Schmitke for the
7 record.

8 The pumping capacity that we would install
9 for the operating mine facility would be approximately
10 1,500 cubic metres per hour. So there's substantially
11 more pumping capacity than we had for the Number 2 shaft.

12 **MEMBER BARNES:** So when you realize the
13 volume of water here coming in, which was, according to
14 your figures, 350, it was not possible to put additional
15 pumps down there to, in a sense, control the water by
16 simply pumping it out?

17 **MR. SCHMITKE:** Barry Schmitke.

18 No. The difficulty there is that you're
19 constrained by the size of the shaft and that the Galloway
20 stage has to pass by the pumping installation as you move
21 the Galloway up and down for moving equipment and moving
22 men and materials at certain times.

23 So you're really restricted by the amount
24 of room that you have available for installation of pumps.

25 **MEMBER BARNES:** Last question. When we

1 were considering the plans for this, we have basically two
2 principal shafts, Shafts 1 and 2, and Shaft 2, which is
3 designed for ventilation and also for egress of personnel.
4 So in a sense you're stymied at 392 in very difficult
5 ground and there's a potential for that ground to continue
6 in a weak state through the next 50 metres into another
7 zone of unconformity in basement rock which also might be
8 rather weak in its strength.

9 At this point, do you believe that from a
10 geotechnical viewpoint you can construct Shaft 2 from 392
11 down to whatever it is, nearly 500 metres, another 100
12 metres or so in such a way that workers in the underground
13 workings could have confidence that that Shaft 2 would
14 have the integrity to work in the two functions that I
15 just outlined?

16 Do you see what I'm getting at? Are the
17 conditions that you're finding at the bottom of the shaft
18 at 392 metres now and what you potentially might encounter
19 for the next 50 to 100 metres, has this given you second
20 thoughts whether Shaft 2 can ever function as a safety
21 exit for staff or for workers?

22 **MR. SCHMITKE:** Barry Schmitke for the
23 record.

24 Certainly, what we have to do in sinking
25 the shaft from 392 to roughly around 480 metres, which is

1 our existing shaft station, we have to sink through frozen
2 ground to ensure that we can sink efficiently and safely,
3 and this is a fairly common practice that has been used
4 both at Cigar Lake and in the potash industry for their
5 shaft development.

6 The second thing that's really important is
7 the installation of the hydrostatic liner from just above
8 the 392-metre level, probably around the 390 or 387-metre
9 level down into a very good basement rock. And we have
10 done some geotechnical drilling in that area and we
11 certainly are planning on doing some additional drilling
12 to make sure that we understand where the interface should
13 be to end the hydrostatic lining. If we have to carry the
14 hydrostatic lining all the way down to the 480 level, then
15 that's what we will do because we know at the 480 level,
16 we're already there and there is good ground condition.

17 **MEMBER BARNES:** Could I just ask staff if
18 they have any comments on what they heard so far.

19 **THE CHAIRPERSON:** Yes. Go ahead.

20 **MR. HOWDEN:** I'd like Mr. Scissons or Mr.
21 Schryer to comment, please.

22 **MR. SCHRYER:** Denis Schryer for the record.

23 We have not seen the proposal that Cameco
24 is currently developing. We are, however, expecting that
25 the details will be forthcoming to us. Our expectation is

1 that all of the aspects that were discussed here will be
2 considered in a full risk assessment and that we plan on
3 having our facility assessment and compliance team as an
4 integral part of this review.

5 So it's early at this point to say yes or
6 no, but we certainly will be diligent in doing our review
7 of this proposal.

8 **THE CHAIRPERSON:** Anything, Dr. McDill? Do
9 you have any questions?

10 **MEMBER McDILL:** Thank you.

11 Have you ever pumped 900,000 kilograms for
12 any other shaft, you know for the same distance of course?

13 **MR. JARRELL:** John Jarrell for the record.

14 Personally, no. I'll ask Barry. Barry has
15 some experience in potash. So he'd probably be in a much
16 better position to answer that question.

17 **MR. SCHMITKE:** Barry Schmitke.

18 At Cigar Lake, we have not pumped this much
19 cement into one location.

20 In the potash industry, I was involved in
21 several shaft remediation jobs and we pumped a lot of
22 cement, and in one case, my memory recalls, we also had to
23 do some fairly unique things to replace what we couldn't
24 grout, and that was essentially putting in cast iron
25 tubing, freezing, all of those sorts of things, which also

1 takes it several levels beyond the grouting of a shaft.

2 **MEMBER McDILL:** So it wouldn't necessarily
3 have been that red flags would have gone up in a situation
4 like this? I think my colleague ---

5 **MR. SCHMITKE:** Barry Schmitke.

6 Not so much in the sense that we couldn't
7 grout the formation off. If we would have sat there long
8 enough and pumped a lot of cement, we would eventually
9 have sealed it off, but it's also a question of timing and
10 schedule. And what we looked at is -- and we had some
11 preliminary discussions with the regulating agencies
12 regarding this -- is to continue on grouting would have
13 taken a substantial period of time with some question of
14 success, in other words total success because obviously
15 even with grouting and cement, you still run the risk of
16 at some point in time in the future it may not have the
17 same integrity as today.

18 So what we looked at is well, what was the
19 best method which we know of to go through this difficult
20 ground, and of course freezing is the next step from where
21 we are today.

22 **MEMBER McDILL:** Two more questions, if I
23 may.

24 If you could bring up the picture of either
25 the valve and the pipe or the ---

1 **THE CHAIRPERSON:** I don't think we have
2 that as overheads as such.

3 **MEMBER McDILL:** We don't? Okay.

4 **THE CHAIRPERSON:** So maybe you can just
5 refer to it. I think everyone has a copy of that, Dr.
6 McDill.

7 **MEMBER McDILL:** Thank you.

8 What was it that was attempted to be
9 tightened? Was it the -- it's not clear to me what it
10 was, that there was a leak at the valve connection. I
11 wonder if ---

12 **MR SCHMITKE:** Barry Schmitke for the
13 record.

14 If you look at the slide showing the
15 grouting equipment where the valve and standpipe are
16 laying horizontally on the ground, the individual was
17 attempting to tighten the valve onto the standpipe.

18 So if you notice that thread where the
19 valve goes into the standpipe, there's an 80-centimetre
20 mark there. I believe the individual is trying to attempt
21 to tighten that location.

22 Now, exactly where the water was coming out
23 from, I'm not exactly sure.

24 **MEMBER McDILL:** So you're not even certain
25 where the tightening was occurring or attempted to be?

1 You believe it was there but you're not certain?

2 **MR. SCHMITKE:** Well, the way the standpipe
3 is constructed, if you look at -- there's a nut there.
4 That nut is welded onto the standpipe, and if you notice,
5 that's at the 70-centimetre mark. So the individual would
6 have put a wrench onto the valve and they would have
7 started turning on that valve.

8 So whether the valve was cross-threaded
9 onto the standpipe, or in fact there was a failure of the
10 standpipe itself at that location, I don't know.

11 **MEMBER McDILL:** And presumably it's under
12 400 meters of water?

13 **MR. JARRELL:** John Jarrell for the record.
14 I should point out, I think you fully
15 expect and we did too, that we would do a root cause
16 analysis of this. One thing we did first was to interview
17 the various people that were in the shaft at the time this
18 event occurred. We haven't finished that report yet but
19 we'll put it together. But when I asked the investigators
20 that looked at it, I think we're going to be somewhat the
21 prisoner of, I think, that evidence business, that you
22 talk to three people, you get slightly different
23 interpretations of what happened.

24 Nevertheless, in the final root cause
25 analysis report, we'll be able to, I think, report as best

1 we can on what was happening there, because that's the
2 part of the analysis we said we should do right away,
3 right off the bat, was to talk to people that were
4 involved and we've completed that part of the root cause
5 analysis.

6 **MEMBER MCDILL:** Thank you.

7 Staff, do you have any comment on that? I
8 do have one more question.

9 **MR. HOWDEN:** I'll ask Kevin Scissons or
10 Denis Schryer to comment if they have any.

11 **MR. SCISSONS:** Kevin Scissons.

12 We have no further comments on the valve or
13 the failure of the valve standpipe arrangement. We will
14 also wait for the evidence and final report from Cameco on
15 this before we can provide any other insights or comments
16 on it.

17 **MEMBER MCDILL:** Thank you.

18 And my final question for Cameco, are you
19 planning now to change your physical model of this part of
20 the -- you know, your fractured rock model so that you
21 have a higher water flow content?

22 **MR. JARRELL:** John Jarrell for the record.

23 We'll have to look at it. As you'd expect,
24 again, you'd expect us to do it. When this happened, of
25 course, we looked at the piesometers around, the ones we

1 had, to see what kind of a response we got for those. We
2 haven't completed an analysis on that yet.

3 My first reaction on that, I think,
4 essentially is this. I'll be interested to see just to
5 what extent we can learn from this, given the fact that
6 we've significantly altered the ground obviously by
7 putting 900,000 kilograms of cement into it.

8 And the other point I'd make, I think, is
9 as we look at this and sort of reaching the unconformity
10 and the kind of difficulties, I think the other thing to
11 bear in mind always is that 100 meters away from this we
12 had another shaft sinking that didn't run into this issue.
13 So to the extent to which this is localized I guess is to
14 be determined, but I think that's probably the other acid
15 test to this, is the fact that we sunk a shaft
16 successfully very, very close to this one.

17 **MEMBER McDILL:** Thank you, Mr. Chair.

18 **THE CHAIRPERSON:** Dr. Dosman.

19 **MEMBER DOSMAN:** Mr. Chair, my question is
20 for CNSC, Mr. Howden.

21 Mr. Howden, in your comments some minutes
22 ago, you referred to other issues or "a number of issues"
23 relating to operation of the site, and I wonder if you
24 might be willing to discuss those issues with the
25 Commission.

1 **MR. HOWDEN:** Barclay Howden speaking.

2 Before I pass this to Saskatoon staff, yes,
3 one of the issues was the SDR we just discussed before
4 with the blast gases. That was one issue. And I'll pass
5 it to Mr. Scissons or Mr. Schryer to comment. But we had
6 been having ongoing concerns and worked through those
7 concerns with Cameco, but I'll ask them to provide you a
8 bit more detail on that.

9 **MR. SCISSONS:** Kevin Scissons.

10 The issue I was referring to was also
11 touched on in the other significant development report
12 presented earlier to the Commission at the end of
13 February, I believe it was, or March, and what it's
14 relating to is an assessment that was done on the facility
15 after one year of construction activities.

16 We did an evaluation report by staff, as
17 presented to the licensee, and they have subsequently
18 responded. In that assessment, after the one year of
19 construction activities, they identified some areas of
20 improvement that were below requirements in a number of
21 the safety areas. We provided the information and
22 documentation to our licensee and the licensee, again, has
23 responded in a report, a response in January. And we are
24 moving forward with that compliance program under this
25 licensed activity for the Cigar Lake facility and it is

1 part of our ongoing joint regulatory process as well with
2 the licensee on their construction activities.

3 **THE CHAIRPERSON:** Dr. Dosman.

4 **MEMBER DOSMAN:** I have a question to CNSC
5 staff. Will you be coming back and reporting to the
6 Commission with regard to once all the options are looked
7 at and whether or not a license amendment may be required?
8 Will you come back with, 1) the options; 2) with whether
9 or not a license amendment and perhaps also the root cause
10 analysis report on that?

11 **MR. HOWDEN:** Barclay Howden speaking.

12 Yes, we will, for sure. We'll definitely
13 come back with an update just to let you know where
14 everything is going, similar to what we've done with the
15 other SDRs as well as the options are rolled out and we
16 examine them, we'll have to come to a conclusion whether
17 an amendment is required or approval under a license
18 condition.

19 But, nonetheless, either way we would come
20 back and report to you. So I expect, as a minimum, we'd
21 come back to you and report one time. If everything isn't
22 contained in that one report then we'd have to come back a
23 second time.

24 Please note that at some point in time
25 Cameco will be applying for an operating license and,

1 again, that will come in front of the Commission if they
2 reach the point where they can actually make that
3 application.

4 Thank you.

5 **THE CHAIRPERSON:** I have one further
6 question for Mr. Jarrell. At any time were any of the
7 workers subject to safety conditions that might turned out
8 in the negative, might have turned out as a disaster with
9 that large influx of water coming in quickly and the
10 evacuation? Was there at any time -- could there have
11 been a very major accident with this influx of water?

12 **MR. JARRELL:** John Jarrell for the record.

13 I think the short answer is no, and I'd
14 expand on that a bit.

15 There were good health and safety
16 precautions taken. There was radiation monitoring done at
17 the time of the event. The sinking of Shaft 2 actually
18 has been very successful from a safety perspective. This
19 is, of course you could argue, it's challenging work and
20 there's been very few lost-time accidents as a result of
21 this incident.

22 There was only one, for example, in 2005.
23 It was a twisted ankle. So given the volume of work that
24 we're doing, actually the safety record's been very, very
25 good in that shaft construction.

1 So from my perspective, my assessment of
2 it, appropriate measures were taken in order to protect
3 the health and safety of the workers -- both radiation
4 protection and conventional.

5 I'd also just, to finish off, just like to
6 talk a little bit about sort of the broader picture that
7 was raised. I think it would be fair to say our
8 perspective is that these are, obviously, very eventful
9 times for the Cigar Lake project. I guess our view is
10 construction is probably likely one of the most
11 challenging times in the life of this facility.

12 When Mr. Howden referred to other issues --
13 I think, one of the things when we look back and reflect
14 on this I think is one of resource expectations, which
15 were somewhat perhaps different at the onset from staff
16 expectations as to how fast one ramps up staff.

17 We put quite a bit of effort into that. I
18 think the other, sort of broadly speaking, the other large
19 lesson learned from sort of bringing this project on is
20 the need to bring some of these health, safety and
21 radiation protection programs on, perhaps, in advance of
22 when they're needed. So I think our expectations have
23 changed. The lesson learned for us, I think, throughout
24 this is to bring these programs on perhaps faster than we
25 might otherwise in the past.

1 I think the other thing we've learned is
2 the need for additional support and oversight from the
3 corporate group. CNSC staff in many of their comments
4 have pointed out that there is quite a bit of expertise
5 within the company to deal with these things. And
6 certainly for the last few months we've spent a fair
7 amount of time making sure that we tap into that expertise
8 so that it's not just the Cigar Lake people alone that are
9 looking at this facility.

10 There has been, I think, a pretty
11 substantive change in the way we're approaching the
12 finishing off of this construction of this mine.

13 Thank you.

14 **THE CHAIRPERSON:** A further question, and
15 I'm just following your line of answering, are you under
16 corporate pressure for shortage of resource at this time
17 that may not have been around 2, 3, 4 years ago to work
18 faster and smarter and get the job done quicker? Is this
19 a part of the corporate thinking?

20 **MR. JARRELL:** John Jarrell for the record.

21 I have no doubt that safety remains the top
22 priority. Obviously our investors and the market's very
23 interested in how fast we could bring this resource on.
24 We provide guidance to our investors as appropriate.
25 There is a potential for some delay as a result of this

1 activity and we've been providing guidance to investors in
2 that regard.

3 But, again, it's sort of into the whole
4 marketing business and the timing of the project. And
5 that's basically where we provide the guidance to those
6 sort of quarterly information things -- annual information
7 forms and the like like that.

8 **THE CHAIRPERSON:** My question was, are you
9 under corporate pressure for a shortage of resource to
10 have more ore produced in a quicker and smarter way?

11 **MR. JARRELL:** John Jarrell for the record.

12 I think not. As I said at the onset, I
13 think safety is the first priority in bringing this
14 resource on.

15 **THE CHAIRPERSON:** Thank you.

16 Are there any other questions from
17 Commission members? From staff?

18 If not, we'll proceed then to -- this must
19 be Cameco's day. We'll proceed then to now move to 4.1.2
20 of the SDRs which is also follow-up to the February 16th
21 meeting in regard to sulphuric acid incidents at the Key
22 Lake operation.

23 Mr. Howden, have you any comments on this
24 item?

25 **MR. HOWDEN:** Barclay Howden speaking.

1 No, nothing further to add to this. Again,
2 Mr. Scissons is available in Saskatoon to respond to
3 questions.

4 Thank you.

5 **THE CHAIRPERSON:** Saskatoon.

6 **MR. SCISSONS:** No, we have no further
7 comments from Saskatoon.

8 **THE CHAIRPERSON:** Mr. Jarrell, do you have
9 any comments?

10 **MR. JARRELL:** John Jarrell for the record.

11 No, we have submitted our root cause report
12 on this. It was submitted on March the 16th. It lays out
13 a corrective action plan that will carry us forward into
14 the summer months of 2006 where there will be additional
15 investigation and some recovery of contaminated soils.
16 So, I think we've responded pretty vigorously to this
17 event.

18 Thank you.

19 **THE CHAIRPERSON:** Commission members.

20 Pardon me. If not, then, we will move to
21 Significant Development Report 4.1.3, which is a follow-up
22 from the February 16th meeting in regard to a truck
23 accident at McClean Lake Operation. Mr. Howden, have you
24 any comments on this item?

25 **MR. HOWDEN:** Barclay Howden speaking.

1 No further comments. Again, I have Mr.
2 Scissons as a resource person in Saskatoon if you have any
3 questions for him.

4 **THE CHAIRPERSON:** I also note that COGEMA
5 Resources Inc. are in Saskatchewan office also via video
6 conference and we'll first start with Mr. Scissons and
7 then I'll ask COGEMA if they have anything to add.

8 **MR. SCISSONS:** This is Kevin Scissons.

9 No, we have no further comments to provide
10 other than what's in our written SDR.

11 **THE CHAIRPERSON:** Mr. Pollock from COGEMA,
12 do you have anything to add?

13 **MR. POLLOCK:** Bob Pollock for the record.

14 No, we have nothing further to add to the
15 statements there. We note that the staff inspection did
16 confirm that the staff was satisfied; we were satisfied
17 before we resumed the work and I note that staff
18 inspection provided further confirmation that the
19 corrective actions had been taken.

20 **THE CHAIRPERSON:** Commission members, Dr.
21 Dosman.

22 **MEMBER DOSMAN:** Mr. Chair, I wonder if I
23 might ask Mr. Pollock to comment on the remedial measures
24 that have been taken at the site.

25 **MR. POLLOCK:** The key measures were to

1 provide some reconfiguration to ensure that we had either
2 one-way traffic or that the roads were not restricted in
3 terms of vehicles being able to meet. We've also provided
4 closer oversight and ensure that the contractor
5 supervision provides more direct oversight of the actual
6 work as it is in progress.

7 **MEMBER DOSMAN:** From the documentation it
8 sounded to me like one-way traffic had been instituted.
9 But it sounds, Mr. Pollock, from what you said, that maybe
10 one-way traffic isn't fully instituted?

11 **MR. POLLOCK:** Before we re-started the work
12 we had reconfigured the area out of the pit so that we had
13 ensured one-way traffic. It was supposed to have been in
14 place at the time of the accident, however, the procedure
15 required the driver to pull-off onto a pull-off area if
16 there was a vehicle coming up. And that procedure was not
17 adhered to at the time of the accident.

18 All he had done is made it such that during
19 that initial binge that the traffic was out one way and
20 there was a fully separate way into the pit. So rather
21 than have an administrative procedure, it was a physical
22 reconfiguration of the access.

23 **MEMBER DOSMAN:** Thank you.

24 And I wonder if I might CNSC staff if staff
25 is confident that these measures are likely to result in

1 the prevention of a future similar event?

2 **MR. HOWDEN:** I'll ask Mr. Scissons to
3 comment on that, please.

4 **MR. SCISSONS:** Kevin Scissons.

5 Yes, we've confirmed through our inspection
6 in February, as well with the project officer on site that
7 these corrective actions appear to be working and should
8 work into the future. We will periodically assess it
9 during inspections in joint regulatory inspections with
10 the other agencies and confirm the success of that, but we
11 are satisfied that these measures have been implemented
12 and should minimize the risks of this type of incident
13 reoccurring.

14 **MEMBER DOSMAN:** Mr. Chair, I take it from
15 the documentation that the worker who was injured in
16 question is planning to return to work. I wonder, Mr.
17 Pollock, if that means the worker has not suffered a
18 permanent disabling injury?

19 **MR. POLLOCK:** The information I have is
20 that the worker expects to make a full recovery, which is
21 good news.

22 **MEMBER DOSMAN:** Thank you.

23 **THE CHAIRPERSON:** Dr. Barnes.

24 **MEMBER BARNES:** On the bullets at the top
25 of page 2, what was the speed limit?

1 **MR. POLLOCK:** Two numbers -- I can recall
2 two numbers. One is 20 kilometres per hour and the other
3 is 30, and I can't off the top recall whether it was 20 or
4 whether it was 30. It was either one or the other. So
5 the speed that was estimated by the reconstruction expert
6 was well above the speed that was supposed to have been
7 used. I don't have the document with me and I can't
8 recall whether the number is 20 or whether it's 30.

9 **MEMBER BARNES:** And was the driver of that
10 vehicle disciplined in any way?

11 **MR. POLLOCK:** The driver is no longer an
12 employee of the contractor.

13 **MEMBER BARNES:** Has he been to the dentist?

14 **MR. POLLOCK:** I don't know.

15 **THE CHAIRPERSON:** Dr. McDill.

16 **MEMBER McDILL:** I think my question is
17 similar. The contractor's supervisor, I guess, was
18 cautioned about fitness of their workers. How can you
19 make sure that that's the case, that the workers are fit?

20 **MR. POLLOCK:** There are two things. One is
21 to encourage people if they are concerned about their
22 fitness to ensure that there's a climate where they can
23 report that, and are in fact encouraged to report it. One
24 does not want people to suppress these sorts of things.
25 And then in many cases it's a matter of if there are

1 visual signs that somebody is under stress to follow-up
2 with them.

3 So I guess at the end of the day, it's
4 extremely difficult to provide a 100 per cent guarantee.
5 One has to rely, certainly to some extent, that if people
6 have conditions that are not going to be visually obvious
7 that they're encouraged to bring those forward. We simply
8 do not want people to be working when they feel that their
9 ability to do so is degraded.

10 **MEMBER McDILL:** Thank you.

11 Maybe I could ask staff to comment on the
12 same thing.

13 **MR. HOWDEN:** I'll ask Mr. Scissons to
14 respond to that.

15 Thank you.

16 **MR. SCISSONS:** Kevin Scissons.

17 In regards to the suitability of workers,
18 we rely on the licensee who is responsible for the
19 operation and the operation of the facilities, including
20 their workers, that they have trained and competent
21 workers who are healthy and available to work. We have to
22 rely on them on a day-to-day measure to have that
23 supervisory oversight, and the workers, including their
24 own Health and Safety Committee, available to deal with
25 the workers needs on a daily basis on their suitability.

1 We have an opportunity during our
2 inspections and our audits and evaluations to measure some
3 of these, but on a day-by-day basis, we have to rely on
4 the licensee and the performance of their workers in
5 accordance with their Act and Regulations, the
6 responsibilities of the workers with due diligence for
7 their activities they perform on site.

8 **MEMBER McDILL:** Thank you.

9 **THE CHAIRPERSON:** Thank you.

10 Any other further questions from Commission
11 Members?

12 If not, we will go on to the next SDR and I
13 thank Mr. Howden and I'll ask Mr. Jammal to come forward.
14 We'll just take a moment to change staff.

15 **(SHORT PAUSE)**

16 **THE CHAIRPERSON:** Thank you.

17 I note Ramzi Jammal, Director General for
18 the Directorate of Nuclear Substances Regulation, is
19 responsible for the next report as outlined in item 4.1.4
20 about a stolen nuclear gauge.

21 Mr. Jammal, do you have any additional
22 comments to make on this report?

23 **MR. JAMMAL:** Thank you, Mr. President,
24 Members of the Commission. For the record, Ramzi Jammal.

25 I would like to add and provide the

1 Commission Members with the following information that was
2 omitted from the SDR. The licensee name is Calfrac Well
3 Services Limited and the licence number is 12987.

4 For the record, I have with me Ms. Pam
5 Jones, Acting Director, and next to me is Jennifer Pyne,
6 Project Officer. Staff is available to answer any
7 questions.

8 **THE CHAIRPERSON:** Thank you, staff.

9 Dr. Barnes.

10 **MEMBER BARNES:** Have the thieves been
11 caught yet?

12 **MR. JAMMAL:** I will ask Ms. Pyne to answer
13 the question.

14 **MS. PYNE:** To our knowledge, they have not
15 been caught as of yet. The vehicle was recovered, but
16 their initial thoughts are that it was a joy ride by some
17 late night lifers. There is a local nightlife close to
18 where the hotel was. They believe it was just joy riders
19 that took both the vehicles, crashed them and left them.

20 **MEMBER BARNES:** Early morning riders
21 really.

22 **(LAUGHTER)**

23 **THE CHAIRPERSON:** Dr. McDill.

24 **MEMBER MCDILL:** Thank you.

25 Has the company changed its policy with

1 respect to keeping vehicles warm on cold mornings near
2 nightlife?

3 **MR. JAMMAL:** For the record, Ramzi Jammal.

4 That's a good question. Part of the action
5 plans provided to us by the company is the nature of the
6 vehicles when we approach the company on action plans and
7 we discussed with them about remote starters, the nature
8 of the vehicles will not allow such thing. But definitely
9 the company has changed their practice. No more start up
10 with the keys in the ignition for warm ups. They have
11 installed in their vehicles for the winter operations
12 external heaters operated by electrical supply to heat up
13 the vehicles without turning on the ignitions.

14 In addition to that, the owner of the
15 company has shown the CNSC that he is aware of his
16 responsibilities and did install GPS in his vehicles of
17 course to protect his assets.

18 **THE CHAIRPERSON:** Dr. Dosman.

19 **MEMBER DOSMAN:** So Mr. Chair, I wonder if I
20 might ask CNSC staff, the gauge was in the vehicle but the
21 gauge wasn't removed from the vehicle presumably. It was
22 kept in its compartment. And is that compartment locked?

23 **MR. JAMMAL:** For the record, Ramzi Jammal.

24 I will pass on the answer to Ms. Pyne.

25 **MS. PYNE:** For the record, Jennifer Pyne.

1 The gauge is double-locked in its
2 compartment in the back of the vehicle.

3 **MEMBER DOSMAN:** And I take it that the
4 company concerned the employees had followed that
5 procedure, the gauge was properly stowed and so on?

6 **MS. PYNE:** Yes, it was. When the vehicle
7 was found, the storage container was found not to have
8 even been tampered with. It was still locked and it had
9 not been attempted to be opened.

10 **MEMBER DOSMAN:** So presumably, the public,
11 including those who borrowed the vehicles, who used the
12 vehicles, were not submitted to any radiological risk
13 because procedures were followed and so on. Am I correct?

14 **MR. JAMMAL:** For the record, yes. The
15 storage of the gauge was properly done, in addition to the
16 visual verification, physical verification was done on the
17 gauge.

18 Once the truck was found in the bush, the
19 licensee did take surveys of the cage itself, where the
20 housing of the gauge is and for the external box, and the
21 measurements submitted to us and the verification have
22 shown that no radiation doses were received by anybody,
23 let it be when the truck was parked, nor the joy riders
24 that decided to steal the truck.

25 **MEMBER DOSMAN:** And is CNSC staff confident

1 that the company is taking serious measures that would be
2 unlikely to -- that would be likely to prevent a
3 reoccurrence of such an incident?

4 **MR. JAMMAL:** For the record, Ramzi Jammal.

5 CNSC staff are satisfied that the licensee
6 has taken extensive measures to ensure that this will not
7 occur, and to mitigate the nature of the incident by not
8 having these vehicles being running for warm up as such
9 and installing alarms and GPS, he did take measures to
10 mitigate such actions.

11 **MEMBER DOSMAN:** Thank you.

12 **THE CHAIRPERSON:** Thank you.

13 A very expensive vehicle and I find it
14 quite astonishing why they didn't have the electric
15 heaters on, which almost every transport has in Canada in
16 the cold winter months, that that wasn't there.

17 Anyway, is there any other comments from
18 Members? If not, thank you very much, Mr. Jammal.

19 Are there any other Significant Development
20 Reports that should be brought to the attention of the
21 Commission today? Mr. Jammal?

22 **MR. JAMMAL:** No.

23 **THE CHAIRPERSON:** Okay. We will then move
24 to the Status Report on Power Reactors. We will move to
25 the next item on the agenda which is Status Report of

1 Power Reactors as outlined in CMD 06-M22.

2 I will ask Mr. Ian Grant, Director General,
3 Directorate of Power Reactor Regulations, whether there
4 are updates he wishes to add to this report. Mr. Grant,
5 is there anything else you would like to add today?

6

7 **06-M22**

8 **Status Report on Power Reactors**

9 **MR. GRANT:** Good afternoon, Mr. Chair.

10 No, there are no further updates to add to
11 the Status Report presented to you.

12 **THE CHAIRPERSON:** Are there any Commission
13 questions?

14 If not, thank you very much.

15 We will now move to the Annual Report on
16 the Decommissioning Plan and the Financial Guarantee for
17 Nuclear Facilities Owned by Ontario Power Generation, and
18 this next item is CMD 06-M23.

19 Again, I will call upon Mr. Ian Grant,
20 Director General, Directorate of Power Reactor Regulations
21 to be present, and I believe he has a couple of staff
22 members also that are here today.

23 Also, I believe we have representatives
24 from OPG. Mr. Nash is here. So would he like to come
25 forward also?

1 First of all, Mr. Grant, do you have
2 anything to report on this CMD 06-M23?

3
4 **06-M23**
5 **Annual Report on the Decommissioning**
6 **Plans and the Financial Guarantee**
7 **for Nuclear Facilities owned by**
8 **Ontario Power Generation Inc.**

9 **MR. GRANT:** Thank you, Mr. Chair.

10 For the record, I am Ian Grant, the
11 Director General of the Directorate of Power Reactor
12 Regulation. With me on my left is Bob Lojk, the Director
13 of the Waste and Decommissioning Division and to my
14 further left, Mr. Robert Barker, Project Officer within
15 that division.

16 Staff does have a presentation to make and
17 will be with you in just a moment, as soon as the
18 technology warms up, and I will pass firstly onto Mr.
19 Barker.

20 **MR. BARKER:** Thank you, Mr. Grant.

21 My name is Robert Barker and I'm the
22 Project Officer in the Waste and Decommissioning Division.

23 CMD 06-M23 presents CNSC staff's third
24 Annual Report to the Commission on the status of
25 decommissioning plans and financial guarantees for Class 1

1 nuclear facilities owned by OPG.

2 In the Commission's decision of May 14,
3 2003, CNSC staff were directed to provide by April 30th of
4 each year a report on decommissioning plans and the
5 associated financial guarantee for OPG's seven facilities
6 listed here.

7 The first and second annual updates were
8 previously reported to the Commission in March of 2004 and
9 April of 2005 respectively.

10 License conditions for these seven
11 facilities requires OPG to submit a decommissioning and
12 financial guarantees report on a frequency to be
13 determined by the Commission or an authorized person.

14 CNSC staff accepted OPG's proposal for an
15 annual update. In addition, OPG provides by January 31st
16 of each year a report containing finalized month-end
17 valuation statements for the previous year for the ONFA or
18 the Ontario Nuclear Funds Agreement and for the NFAA, or
19 the Nuclear Fuel Waste Act Trust.

20 The financial guarantee for OPG's facility
21 comprises of three components: segregated funds
22 established pursuant to the ONFA between OPG and the
23 Province of Ontario -- the CNSC has access to these funds
24 through an Access Agreement between the CNSC, the Province
25 of Ontario and OPG -- secondly, a trust fund for the

1 management of used fuel established pursuant to the
2 *Nuclear Fuel Waste Act* and; thirdly, a provincial
3 guarantee pursuant to the Provincial Guarantee Agreement
4 between the CNSC and the Province of Ontario which came
5 into effect on July 31st, 2003.

6 For 2006, OPG has estimated the total
7 decommissioning cost for these facilities at \$19.509
8 billion. As these costs are to be realized at future
9 dates, the present value guarantee required in 2006
10 dollars is \$7.323 billion.

11 Although there has been no change to the
12 assumptions used to calculate the present value, the
13 estimated costs have changed from those previously
14 reported due to the difference in actual escalation from
15 previously forecasted values. That is, estimated costs
16 have risen more slowly than originally predicted,
17 resulting in the decrease of \$162 million in the present
18 value.

19 Currently, OPG has segregated funds valued
20 at about \$7.193 billion in the ONFA and the NFAA Trust and
21 the provincial guarantee which was set at \$1.51 billion in
22 2003 for 2006 will comprise the remaining \$130 million.

23 For 2007 it is predicted that the value of
24 the required financial guarantee will be in the order of
25 \$7.817 billion. At that time, it is expected that the

1 ONFA and the NWFA Trust will be valued at \$8.056 billion
2 and that there will be no requirement for the provincial
3 guarantee.

4 CNSC staff have reviewed the annual
5 valuation report for the ONFA funds and the NFAA Trust and
6 reviewed OPG's annual report on decommissioning.

7 CNSC staff is satisfied that the fund
8 accumulation has been attained and is satisfied with the
9 information submitted by OPG.

10 With respect to the projected operational
11 changes and the potential for impact on the value of the
12 financial guarantee, OPG reports that the following
13 activities, the submission of the NWMO report to the
14 government, OPG's proposal for a deep geological
15 repository for lone intermediate level waste, the decision
16 to rehabilitate Bruce A and the decision to permanently
17 shut down Units 2 and 3 at Pickering A, will not
18 significantly change OPG's liability or the overall value
19 of the financial guarantee.

20 The present value impact or the early
21 shutdown of the Pickering A units has been assessed to be
22 more than balanced by the life extensions on Units 1 and 4
23 and also by the later shutdown for the Bruce A units as a
24 result of rehabilitation.

25 Although accounted for in this annual

1 update, OPG will be reviewing in detail its
2 decommissioning plans for its facilities towards the end
3 of this year.

4 After this review cycle concludes, CNSC
5 staff would consider that a five-year ongoing requirement
6 for a detailed review of OPG's decommissioning plans to be
7 acceptable, provided that any changes are properly
8 captured in the annual review of its financial guarantees.

9 In summary, CNSC staff concludes that OPG's
10 financial guarantee continues to be valid and in effect
11 and that the amount of the guarantee is sufficient to meet
12 currently projected future decommissioning costs and CNSC
13 staff will continue to review OPG's financial guarantee on
14 an annual basis as part of its normal compliance
15 activities.

16 CNSC staff is recommending to only formally
17 report to the Commission on the acceptability of OPG's
18 financial guarantees on the renewal of each OPG licence
19 or, if required, through a Significant Development Report.

20 Thank you and this concludes staff's
21 presentation and I turn it back to Mr. Grant.

22 **MR. GRANT:** Thank you, Mr. Barker and Mr.
23 Chair. The staff is available for any questions the
24 Commission may have.

25 **THE CHAIRPERSON:** Before we do that, Mr.

1 Nash, do you have any comments?

2 **MR. NASH:** No further comment. Ken Nash.

3 **THE CHAIRPERSON:** Thank you.

4 Commission Members? Dr. Barnes.

5 **MEMBER BARNES:** Just the difference in
6 slide 6 and 7 of staff where basically the provincial
7 guarantee now is down to zero. So your expectation is for
8 the foreseeable future that the provincial guarantee would
9 pretty well stay at zero. Is that right? Until there was
10 some substantial cost incurred in decommissioning, by
11 which time the trust itself would presumably be at a much
12 higher level.

13 **MR. GRANT:** Ian Grant, for the record.
14 I'll call on Mr. Lojk to answer the
15 question, Dr. Barnes.

16 **MR. LOJK:** Dr. Barnes is correct.

17 **MEMBER BARNES:** And the second question is,
18 the first sentence in 4.0 on page 3, which reads "Reactor
19 decommissioning plans are based on a planned operating
20 life of all units of 40 years". Does this include an
21 assumption that certain of the units are going to get
22 refurbished or does it -- or have been refurbished?

23 **MR. LOJK:** Bob Lojk, for the record.

24 Could you repeat the reference again?

25 Sorry.

1 **MEMBER BARNES:** Sure. It's the first
2 sentence in section 4.0 on page 3, Reactor Decommissioning
3 Plans and Cost Estimates. And your first sentence reads,
4 "Reactor decommissioning plans are based on a planned
5 operating life of all units of 40 years". My question
6 was, is that 40 years -- does that take into account the
7 refurbishment of some of the units or planned
8 refurbishment?

9 **MR. LOJK:** We're discussing now OPG's
10 report on that. As far as I'm looking at it right now, is
11 the existing operating life and with whatever refits are
12 required to achieve the 40-year operating life, not a full
13 refurbishment. OPG may want to comment from our
14 understanding of the situation.

15 **MR. NASH:** Ken Nash.

16 What we've done for purposes of
17 establishing some reference plans to allow us to cost this
18 out and do present value calculations, we've normally
19 assumed -- this is back in 2003 when we first established
20 the guarantee -- that all reactors would operate for 40
21 years. I think at that point, we recognized that some
22 would be refurbished and operate for well beyond the 40
23 years and some reactors would perhaps not be refurbished.
24 Pickering 2 and 3 has turned out to be in the second
25 category. Bruce A has turned out to be in the first

1 category.

2 So we used a nominal 40 years. I think the
3 next time around, when we do this five-year review that
4 staff mentioned, which will occur starting towards the end
5 of this year, we'll probably use the latest projections of
6 what will be and what won't be refurbished. And we've got
7 a much clearer view now of the refurbishment program. So
8 it's a nominal 40 years for all reactors that was used for
9 financial planning purposes. That's not to say that we're
10 predicting all reactors are going to last exactly 40
11 years.

12 **MEMBER BARNES:** I understand that and
13 correct me if I'm wrong, just from distant memory, when
14 they were built, they were kind of like somewhere between
15 25 and 40. Isn't that it? Or was it planned when most of
16 these were built that their design life was 40 years, you
17 know, that being a round number, not an absolute number?

18 **MR. NASH:** Ken Nash.

19 **MEMBER BARNES:** My point is, is this a
20 false assumption, right, on the basis that already a
21 number of these reactor units have gone through a
22 refurbishment or it's been decided that they're not going
23 to go through a refurbishment? But certainly there has
24 been a refurbishment factor in the ones listed here and
25 I'm trying to find out whether that refurbishment factor,

1 which would extend the life of them, should really affect
2 this assumption that their life is 40 years?

3 **THE CHAIRPERSON:** Mr. Grant, would you like
4 to comment?

5 **MR. GRANT:** Thank you, Mr. Chair. For the
6 record, Ian Grant.

7 At the time of original licensing, there
8 was a nominal assumption that a unit lifetime would be of
9 the order of 30 to 40 years. The staff report notes that
10 there have been some variations in decisions to refurbish
11 units and to shut down some units and the comment in the
12 report in section 4.0 is that "the present value impact on
13 the financial guarantee caused by the early shut-down of
14 Pickering 2 and 3 has been assessed to be balanced by the
15 life extension of other units".

16 And we've gone on to -- so our estimate is
17 that the changes that have taken place kind of net out and
18 that there's a commitment to carry out a further detailed
19 review, at which time Mr. Nash has noted that the actual -
20 - the latest plans will be taken into account in that
21 review. I hope that explains the situation.

22 **THE CHAIRPERSON:** Dr. McDill.

23 **MEMBER McDILL:** Staff is now proposing five
24 years. When would we hear about this again? We just
25 heard Mr. Nash say something about five years and we've

1 been hearing annually.

2 **MR. LOJK:** Perhaps we weren't clear on what
3 staff's expectations were. Right now, OPG is unique in
4 being asked to report on a yearly basis, provide not only
5 a report, which is correct, on a yearly basis but also to
6 -- that we would have to bring in front of the Commission
7 a report at the meeting on OPG's financial guarantee. We
8 don't make that requirement of other licensees. It
9 happens to be unique. It rolls as a comment made at a
10 Commission hearing.

11 What staff is proposing that we would,
12 rather than report, that we will still obtain the yearly
13 reports from OPG. We would assess the yearly report from
14 OPG, but only report to you as an extraordinary item, if
15 there are problems with the report. And then we would
16 continue to report on the adequacy of the financial
17 guarantees at the renewal of each licence for OPG, for
18 each facility, rather than as a whole.

19 Furthermore, we would report to you on the
20 adequacy of the five-year re-think that OPG will be doing
21 shortly of their whole facility, where they are basically
22 taking all their estimates for square one. We would
23 review them. We would hire a consultant who is an expert
24 in finances, an expert in decommissioning costs and re-
25 baseline. What we're doing now essentially, we're taking

1 -- we're just looking to see whether there are any
2 variances from the original. Rather than doing a full
3 detailed technical review from square one, we're only
4 looking at the variances from the previous reports.

5 **MS. McDILL:** Thank you.

6 **THE CHAIRPERSON:** Dr. Dosman.

7 **MEMBER DOSMAN:** Thank you, Mr. Chair.

8 I'd just like to inquire -- I think of Mr.
9 Nash or perhaps CNSC. I take it, if I've got it right,
10 that when a unit is refurbished, the likelihood of it
11 requiring decommissioning goes down and the estimated
12 guarantee goes down. When a unit is taken out of
13 production, the likelihood of decommissioning becomes
14 greater, so the financial guarantee goes up. Do I have it
15 correctly, Mr. Nash? Or is it the other way around?

16 **MR. NASH:** Ken Nash.

17 No, you've got it the right way around.
18 That's perfectly correct.

19 **MEMBER DOSMAN:** And so as "A" follows "B",
20 for example, if Bruce is refurbishing units or Pickering,
21 the financial guarantee goes down and that's one of the
22 reasons for it going down, presumably?

23 **MR. NASH:** Yes, that's correct. For
24 instance, our working assumption is that when any of our
25 preliminary decommissioning plans, a reactor shuts down,

1 put in safe store and then on a four unit basis, the four
2 units would start to be dismantled 30 years after the shut
3 down.

4 If the reactors are rehabilitated, that
5 date when they have to be dismantled moves further into
6 the future. Whilst the overall cost would stay the same,
7 the present value of that cost would tend to go down. So
8 hence the need for a guarantee for that unit would tend to
9 go down.

10 **MEMBER DOSMAN:** Thank you. I take it then,
11 that at the moment, the trust is growing, the principal in
12 the trust is increasing somewhat more rapidly than the
13 projected guarantee required.

14 **MR. NASH:** Yes, that's correct. When we
15 first established the guarantee a number of years ago,
16 2003, the value of the trust was \$1.5 billion short of the
17 total guarantee. We needed a promise to renew our
18 guarantee from the provincial government to cover the
19 difference.

20 When we complete the next five-year review,
21 we anticipate that we have to redo all the cost estimates,
22 re-baseline the cost estimates, and look at a wide range
23 of factors. We do anticipate that guarantee will not be
24 needed, provincial guarantee, because the value of the
25 trust will have grown in combination of the performance of

1 the trust and also the additional contributions we've made
2 over that period. We continue to make \$454 million
3 contribution this year and similar numbers planned for
4 next year.

5 **MEMBER DOSMAN:** Thank you very kindly.

6 **THE CHAIRPERSON:** Just one observation and
7 I think I'm correct also for following what Dr. Dosman
8 said. Money cannot be taken from the decommissioning fund
9 for refurbishment, can it or it can't be?

10 **MR. NASH:** No, absolutely not. The Ontario
11 Nuclear Funds Agreement strictly prohibits that and there
12 are trustees, there are procedures that only allow these
13 funds to be taken out under certain conditions and those
14 conditions must meet the requirements of -- it must be for
15 waste management. It must offer for decommissioning in
16 accordance with the plan on which the trust was
17 established. So it can't be used for any other purpose.

18 **THE CHAIRPERSON:** Thank you. Any other
19 questions from the Commission?

20 If not, that concludes that. Now, we will
21 go to -- if I can find where I am here now -- we will now
22 move to CMD 05-M23 and the next item on the agenda -- oh,
23 pardon me, it's to replace 05-M23 and the new one is CMD
24 06-M24 -- I apologize -- concerning the need to replace as
25 mentioned and I would ask Mr. Ken Pereira, Executive Vice-

1 President of Operations, to come forward.

2 **06-M24**

3 **Need to replace CMD 05-M23**

4 **to respond to operational**

5 **needs and changes at the**

6 **CNSC**

7 **THE CHAIRPERSON:** Good afternoon, Mr.

8 Pereira, and would you like to present CMD 06-M24?

9 **MR. PEREIRA:** Thank you, Mr. Chair and
10 Members of the Commission. For the record, my name is Ken
11 Pereira. I am the Executive Vice-President of the
12 Operations Branch of the CNSC.

13 Commission Member Document 06-M24 is an
14 update on earlier CMDs on the authorization of designated
15 officers. This CMD is being tabled today to reflect
16 recent organizational and divisional name changes in the
17 CNSC Operations Branch, as well as to align certain
18 authorities with operational requirements.

19 It proposes additional authorization to
20 address operational requirements in response to emergency
21 situations. The bold text in Appendix "A" in the CMD
22 highlights this particular change. It is recommended that
23 the Commission make the designations described by title of
24 office in the designated officers' list presented in CMD
25 06-M24.

1 Should the Commission accept this
2 recommendation, each proposed designated officer will be
3 provided with a certificate bearing both the name of the
4 person and the corresponding position as listed in the
5 CMD.

6 This concludes my remarks. CNSC staff
7 would be pleased to provide any clarification that the
8 Commission Members may desire. Thank you.

9 **THE CHAIRPERSON:** Thank you, Mr. Pereira.
10 Questions. Dr. Dosman, do you have any
11 questions?

12 **MEMBER DOSMAN:** Thank you, Mr. Chair.

13 I take it, Mr. Pereira, that the change in
14 the designations and titles doesn't necessarily mean any
15 change in reporting structures that might affect the
16 regulatory process?

17 **MR. PEREIRA:** No, not really, other than
18 recent clarification on the role of designated officers
19 with respect to decisions taken by the Commission and
20 those changes are being implemented with the use of panels
21 and so on. But the primary function of designated
22 officers, the bulk of the work done by designated
23 officers, relates to licensing decisions on regulatory
24 activities that are carried out for a number of other
25 licences, the use of nuclear substances and so on. This

1 is the bulk of the work done by the designated officers.

2 **MEMBER DOSMAN:** Thank you.

3 **THE CHAIRPERSON:** Any other Commission
4 comments?

5 Dr. McDill, do you have anything?

6 **MEMBER MCDILL:** There are only two in bold
7 apart from a few titles; is that correct? The Emergency
8 Management Programs Division in both cases.

9 **MR. PEREIRA:** That is correct. That is the
10 only new function added to the role of designated
11 officers. The other changes are changes -- just the
12 reassignment of the same functions to different
13 organizational units and some of the organizational
14 changes have arisen because the organization has grown in
15 recent months and we've had to reorganize to provide
16 effective management of our regulatory program.

17 **MEMBER MCDILL:** So in rough numbers, how
18 many -- what's the net change in the number of designated
19 officers?

20 **MR. PEREIRA:** I'll ask Mr. Bouchard if he
21 knows the number exactly.

22 **MR. BOUCHARD:** For the record, André
23 Bouchard, Acting Director of the Regulatory Program
24 Improvement Division.

25 There has been an estimate of about seven

1 new directors -- divisions actually created during the
2 year '05-'06 to these current ones that are treated within
3 this CMD. So therefore, we're looking at seven new
4 divisions and designated officer corresponding with them.

5 **MEMBER McDILL:** Thank you.

6 **THE CHAIRPERSON:** Thank you very much, Mr.
7 Pereira and staff.

8 This brings an end to the public meeting of
9 the Commission. I refer Members to M25 concerning the
10 next Commission hearing meeting which will be held on May
11 19th, 2006. I thank you all for your attendance and I
12 move adjournment.

13 --- Upon adjourning at 4:40 p.m.

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