

1 **HEARING DAY 1**

2 **Cameco Corporation: Application to manage a**
3 **nuclear facility and evaluate mining methods at**
4 **the Cigar Lake Project**

5 September 4 was the deadline set
6 for filing by Applicant and by CNSC staff.
7 September 28, deadline for filing supplementary
8 information for Applicant and for the Commission
9 staff.

10

11 **01-H27.1/01-H27.1A**

12 **Oral presentation by Cameco Corporation**

13 THE CHAIRPERSON: We will begin by
14 an oral presentation from Cameco Corporation, as
15 outlined in CMD Documents 01-H27.1/01-H27.1A. I
16 will turn it over to Mr. Chad again.

17 MR. CHAD: Thank you, Madam Chair.

18 Good afternoon, Madam Chair and
19 members of the Commission. For the record, I am
20 Gary Chad, Senior Vice-President, Law and
21 Regulatory Affairs and Corporate Secretary of
22 Cameco Corporation, the Applicant.

23 I am here today in support of our
24 application to obtain a Uranium Mine Site
25 Preparation licence for the Cigar Lake Project.

1 With me today are John Jarrell, our
2 Vice-President, Environment and Safety, and Mark
3 Wittrup, our Director of Environment. Also here
4 today in support of this application are John
5 Tosney, President, Cigar Lake Mining Corporation.
6 Mr. Tosney is directly behind me on my right. On
7 my left behind me is Mr. Barry Schmitke, the
8 General Manager of the Cigar Lake Project.

9 The management team at Cameco is
10 looking forward to taking over the operatorship of
11 this project. It is a very important operation
12 for Cameco, representing a large portion of our
13 future uranium business.

14 Cameco plans to fully integrate
15 the Cigar Lake staff into our organizational
16 structure. It will be managed in the same
17 management structure as our other Saskatchewan
18 uranium mines, with the General Manager reporting
19 to our Vice-President, Mining, who reports
20 directly to the CEO.

21 As well, the operation will be
22 supported by our head office technical
23 infrastructure, including our Environment and
24 Safety group and our Engineering group.

25 Our commitment to our corporate

1 quality assurance program at Cameco also includes
2 the Cigar Lake Project. Cameco brings to the
3 Cigar Lake Project our experience in developing
4 and operating the high grade McArthur River mine.
5 We, at Cameco, believe we have a good corporate
6 oversight to ensure that the performance of our
7 operations and employees are of high quality and
8 comply with the Nuclear Safety and Control Act and
9 its Regulations.

10 I would now like to call upon Mr.
11 Jarrell to make a formal presentation to you.
12 After Mr. Jarrell's presentation, we would be
13 pleased to answer any of the questions the
14 Commission would have of Cameco.

15 MR. JARRELL: Thank you.

16 For the transcript record, my name
17 is John Jarrell. I am Vice-President, Environment
18 and Safety.

19 I would like to give a brief
20 summary of our written submission this afternoon.

21 We are here today in support of a
22 request by the Cigar Lake joint venture to change
23 responsibilities for operating the Cigar Lake
24 Project from the Cigar Lake Mining Corporation or
25 CLMC to Cameco Corporation. The joint venture, in

1 making this request, is to take full advantage of
2 the experience gained in bringing the high grade
3 McArthur River Project into production. It must
4 be stressed that this is a change of operatorship,
5 not ownership, of the project.

6 The ownership remains the same,
7 with Cameco Corporation holding the largest
8 portion of the joint venture, followed by COGEMA
9 Resources.

10 The Cigar Lake Project is centred
11 around the task of developing what is currently
12 the world's second largest high grade uranium
13 deposit. As has been noted in previous Cigar Lake
14 presentations to this Commission, this high grade,
15 unconformity-type deposit has current proven
16 mining reserves of 226 million pounds of U3O8 at
17 an average grade of 20.67 per cent and current
18 inferred resources of an additional 118 million
19 pounds at 16.92 per cent.

20 The first uranium mineralization
21 on this site was discovered in 1981. In 1985,
22 Cigar Lake Mining Corporation was created to
23 construct a test mine and ultimately develop a
24 production mine. Operations commenced in 1987 to
25 assess site conditions and field test new mining

1 methods.

2 Following development of the test
3 mining between 1988 and 1991 and a period of test
4 mining, an EIS for project development was filed
5 in 1995. Government approval to proceed to
6 licensing was received the following year, in
7 1998. Additional test mining was carried out in
8 the year 2000.

9 In summary, activities from 1987
10 through 1992 focused on selection of a viable and
11 cost-effective mining method to overcome the
12 challenges of ground water, weak rock formations
13 and unique radiation protection requirements,
14 whereas the activities from 1996 through 2000
15 focused on optimization of the selective mining
16 method and equipment development.

17 The test mine was under care and
18 maintenance between 1992 through 1996, and it is
19 currently under care and maintenance since
20 December of 2000. The joint venture owners are
21 currently considering a feasibility study on
22 project development, which would see Cigar Lake
23 ores processed on a toll milling basis at COGEMA's
24 McClean Lake and Cameco's Rabbit Lake mills,
25 subject of course to regulatory approval.

1 Projected life of the mine is
2 subject to uranium market conditions, but based on
3 current mining plans, the Cigar Lake Project is
4 anticipated to last about 40 years.

5 Licence renewal for Cigar Lake was
6 most recently considered at the June 28, 2001
7 Commission hearing. The licence was issued on
8 July 30, 2001 for a three-year period to July 31,
9 2004, unless otherwise suspended, amended, revoked
10 or replaced.

11 At the Day One hearing of the most
12 recent licensing action held on May 29, 2001,
13 Cigar Lake Mining Corporation indicated the
14 owner's intent to change operatorship. A formal
15 request to revoke the licence was made by Cigar
16 Lake Mining Corporation on July 5, 2001. On the
17 following day, on July 6, Cameco formally
18 requested the licence to operate this project.

19 On July 16, a modified mining
20 facility licensing manual, a facilities
21 description manual, and a modified licensing
22 program and procedures manual were filed in
23 support of the current request.

24 In revising CLMC's licence
25 documentation to reflect Cameco's proposed new

1 role, minor wording changes were made to reflect
2 the new operator. CLMC's health and safety
3 policies were replaced with Cameco's, and minor
4 changes were made to organizational and management
5 information in this documentation.

6 In essence, Cameco intends to
7 abide by existing commitments, policies, programs
8 and procedures either directly referenced in the
9 licence, Act and Regulations, or indirectly
10 through mine facility licensing manuals and
11 procedures. Any significant future changes in
12 this documentation would be proposed and dealt
13 with under the normal regulatory process.

14 The documentation supporting the
15 current application is essentially the same as
16 that considered by the Commission in licence
17 renewal to CLMC earlier this year. This is not
18 entirely surprising for a number of reasons.

19 First, efforts have been made to
20 take a collaborative approach to licensing
21 documentation within the northern Saskatchewan
22 mining community.

23 Second, a new Act and Regulations
24 have caused all operators to reissue their
25 licensing documentation. Hence, it is all of the

1 same vintage.

2 Finally, the most recent CLMC
3 documentation was prepared by a former Cameco
4 Environment and Safety person who had transferred
5 to CLMC. Hence, the significant documentation
6 revisions were not necessary, and consequently,
7 the change of operatorship should be easier to
8 implement.

9 Cameco does not propose to change
10 the scope of activities previously approved for
11 this project, nor are there any current proposals
12 to change the scope of activities over the
13 remainder of the current licensing period. As
14 previously stated, any significant changes would
15 be proposed and dispositioned by the normal
16 regulatory approval process.

17 Subject to project-specific
18 approvals, the following activities are
19 contemplated over the current licensing period:
20 Development of production elevation access to the
21 north side of the orebody to assess geotechnical
22 conditions; surface drilling for geological and
23 geotechnical purposes, including a pilot hole for
24 the second shaft; underground drilling for freeze
25 hole test work and geological/geotechnical data

1 collection; additional testing of the jet boring
2 system; and modification and enhancements to site
3 services such as the camp and other surface
4 ancillary facilities.

5 Cameco intends to maintain project
6 continuity. We intend to retain key management
7 personnel, for instance, the General Manager, who
8 is here today, and the Project Superintendent of
9 Environment and Safety. We also intend to retain
10 the majority of CLMC employees. The objective is
11 to integrate the Cigar Lake Project into the
12 Cameco Mining Division, as Gary Chad had
13 mentioned, much as is the case with other
14 Cameco-operated mine sites.

15 In all Cameco operations, the
16 responsibility for environment and safety matters
17 centres on the site, with the Manager of
18 Environment and Safety reporting directly to the
19 site's senior manager to promote site-based
20 accountability. Support is provided from a
21 corporate environment and safety group, which
22 provides centralized expertise in such matters as
23 radiation protection, hydrology and safety
24 assessment. We believe that the current CLMC
25 structure is a good fit into the Cameco

1 operational model.

2 There are currently 38 CLMC
3 employees; 23 based at site and 15 in Saskatoon.
4 Seven of the Saskatoon-based technical staff were
5 relocated to the Cameco head office on July 3,
6 2001. This included the General Manager,
7 Superintendent of Environment and Safety, Senior
8 Projects Engineer, Chief Mine Engineer, Senior
9 Mine Engineer, Chief Geologist and Senior Design
10 Coordinator.

11 This move was made for three
12 reasons. First, to integrate the Detailed Design
13 Team. Second, to familiarize CLMC staff with
14 Cameco's business practices, and third, to
15 familiarize Cameco's technical employees with the
16 Cigar Lake Project. In October we plan three
17 trips to the Cigar Lake site to give Cameco head
18 office employees a chance to become more familiar
19 with the Cigar Lake Project.

20 As noted previously, the Cigar
21 Lake Project will be integrated into the Cameco
22 management structure. This organization chart
23 shows those parts of the organization directly
24 related to the Cigar Lake Project at a senior
25 management level. Note that the Cigar Lake

1 General Manager will report to the VP Mining, much
2 as Key, McArthur and Rabbit Lake do. Note also,
3 the position of Quality Assurance Manager has
4 recently been added reporting directly to our CEO.

5 For general information, it should
6 also be noted that Cameco's President has direct
7 responsibilities for marketing, corporate
8 development, exploration and fuel services. The
9 Port Hope and Blind River facilities which are
10 scheduled for Day One licence renewal hearings at
11 the next Commission meeting in November.

12 We believe Cameco's experience in
13 developing and operating uranium projects makes it
14 well suited to take on the operating role of Cigar
15 Lake. By moving more directly into Cameco's
16 sphere of influence, the Cigar Lake Project will
17 be better able to benefit from Cameco's experience
18 in the number of areas as noted in this slide,
19 particularly in the development and operation of
20 the McArthur River Project shown in the background
21 of this slide.

22 While Cameco's experience has
23 always been available to CLMC, we believe direct
24 integration should lead to a higher level of
25 collaboration bringing additional resources to the

1 project. Direct integration will also promote a
2 higher level of involvement in Cameco's quality
3 assurance, environmental management system and
4 health and safety management systems all under
5 development. Cigar Lake will also become involved
6 in Cameco's internal environment and safety audit
7 program, which is currently being revised after
8 ten years of operation.

9 The overall objective is to
10 preserve existing expertise and augment it with
11 additional support.

12 There have been a number of recent
13 meetings where this proposed change of
14 operatorship has been outlined and discussed. An
15 Athabasca environmental quality meeting held on
16 April the 17th, a multi-regulatory meeting held on
17 May 4th, the Athabasca Working Group meeting on
18 May 15th and a Northern Labour Market Committee
19 meeting held on June the 13th. Both Cameco and
20 CLMC were active participants in these meetings.
21 The proposal has also been noted in joint
22 industry/Saskatchewan government publication such
23 as "Opportunity North."

24 As currently envisioned, the
25 construction application will be proposed in two

1 phases. This is the same approach employed at
2 McArthur River shown in this picture. The first
3 application will focus on critical path items such
4 as the second shaft and the freezing system as
5 well as infrastructure support requirements. The
6 second application or construction licence
7 amendment will focus on the mining and ore
8 processing aspects of the project. These later
9 aspects generally require more detailed
10 engineering and assessment.

11 As at McArthur, Cameco intends to
12 work closely with CNSC staff to ensure our
13 submissions are timely and reflect the information
14 requirements of the Commission staff.

15 This project's final schedule is
16 perhaps obviously influenced by such
17 considerations as commodity prices and market
18 conditions. From a licensing perspective, the
19 project will find itself before this Commission on
20 a number of occasions as it seeks various licences
21 and licence modifications.

22 There will be three major
23 regulatory assessment and approval processes above
24 and beyond site-based construction approval
25 activities for the entire project. Specifically

1 modifications to COGEMA's McClean Lake mill, an
2 EIS to modify the original scope of the assessed
3 project to permit custom milling of Cigar Lake
4 materials at Rabbit Lake and the Cigar Lake waste
5 rock disposal EIS, which was filed on August 20,
6 2001 following earlier submissions on waste rock
7 disposal options filed in August 1999 and May
8 2000.

9 The Cigar Lake mining corporation
10 licence issued on July 30, 2001 included three
11 special licence conditions which warrant some
12 discussion. First, there was a condition to
13 submit a proposal and a schedule for completion of
14 a quality assurance program by September 29, 2001.
15 On September 18th, Cigar Lake Mining Corporation
16 filed a submission indicating the CLMC was
17 coordinating their effort with Cameco in
18 anticipation of the currently requested change of
19 operatorship. This progress report has been
20 accepted by Commission staff.

21 Next is a condition EP3 which
22 requires submission of a procedure to identify
23 when and how hazardous material spills will be
24 reported to the CNSC and remediation measures
25 protocols. This is required by November 30, 2001

1 and will be written so as to be compatible with
2 similar procedures at other Cameco sites.
3 Condition G5, which is being continued into the
4 proposed Cameco licence, requires an update to the
5 conceptual decommissioning plan and associated
6 financial guarantees by March 1, 2002.

7 The proposed Cameco licence
8 synchronizes quality assurance program
9 requirements with three other mining facility
10 licences in Key Lake, McArthur River and Rabbit
11 Lake. There is a requirement to re-issue
12 decommissioning financial guarantees naming Cameco
13 as operator. Neither of these new conditions
14 materially effect existing Cameco licensing
15 obligations.

16 A brief outline of Cameco's
17 progress in developing a formal, corporately
18 integrated quality assurance program acceptable to
19 the Commission is appropriate. The program began
20 with a consultant-led workshop to develop some
21 outlooks as to what the program should attempt to
22 do. We selected consultants with experience in
23 the North American nuclear industry. We also
24 decided to hire a quality assurance specialist to
25 provide program direction and focal point.

1 The new manager is reporting
2 directly to our CEO, Bernard Michel, as I
3 mentioned. We also retained the two consultants
4 who led us through this internal workshop to visit
5 our five operating sites, develop a general
6 outline of the quality assurance program and
7 conduct a gap analysis, a readiness review.

8 On what is currently a parallel
9 track, the Cigar Lake Design Team has retained
10 another QA consultant to lead them through the
11 development of project specific, formal procedures
12 for the detailed engineering design, equipment
13 procurement and site construction aspects of the
14 Cigar Lake Project.

15 In summary, we believe that the
16 proposed changes will not negatively impact on the
17 project, the environment or worker health and
18 safety. We say this on the basis of the following
19 facts.

20 Cameco brings additional
21 experience to the project, the project will have
22 closer access to Cameco's support functions, yet
23 will retain the support other project owners.
24 Cameco will abide by commitments made by the
25 current operator and there will be no significant

1 changes in the policies and programs governing
2 this project. The project ownership is unchanged
3 and there is no change in the amount of or
4 responsibility for decommissioning or its
5 financial assurance.

6 We therefore respectfully request
7 that the Commission give favourable consideration
8 to Cigar Lake Mining Corporation's request to
9 relinquish its role as project licensee and issue
10 Cameco a Uranium Mine Site Preparation licence for
11 the Cigar Lake Project. This is done in
12 accordance with a request by the joint venture
13 owners to appoint Cameco as the project's
14 operator.

15 We also request consideration of
16 making the proposed change effective January 1,
17 2002 and for retention of the existing multi-year
18 licence period granted earlier this year to the
19 Cigar Lake Mining Corporation.

20 As Mr. Chad mentioned, both Cameco
21 and Cigar Lake Mining Corporation are here today
22 to answer any questions you may have either now or
23 later in these proceedings.

24 Thank you for your attention.

25 THE CHAIRPERSON: Thank you very

1 much.

2 With the permission of the
3 Commission Members, I would like to turn to the
4 oral presentation by the CNSC staff before we open
5 the floor to questions.

6 With that in mind, I would turn to
7 CNSC staff as outlined in Document CMD 01-H27 and
8 call upon Mr. Pereira, please.

9

10 **01-H27**

11 **Oral presentation by CNSC staff**

12 MR. PEREIRA: Thank you,
13 Madam Chair.

14 For the record, my name is Ken
15 Pereira. I'm the Director General of the
16 Directorate of Fuel Cycle and Materials
17 Regulation.

18 Uranium was discovered at Cigar
19 Lake in Saskatchewan in 1981. The Atomic Energy
20 Control Board first issued a licence to the Cigar
21 Lake Mining Corporation in 1987 to assess ground
22 conditions for an underground mine and to evaluate
23 mining methods. The Cigar Lake Mining Corporation
24 has been licensed since then to continue with this
25 test work.

1 An environmental impact assessment
2 was considered under the Environmental Assessment
3 and Review Process Guidelines Order for this
4 project between 1995 and 1997. The project
5 involves mining of high-grade uranium orebody at
6 the Cigar Lake over a 40-year period with ore
7 being transported to the Cigar Lake for
8 processing. The Panel recommended that the
9 project be allowed to proceed.

10 The owners of the Cigar Lake
11 Project now wish to replace the current operator,
12 the Cigar Lake Mining Corporation, with the Cameco
13 Corporation. Consequently, Cameco has submitted
14 an application to the Commission to obtain a
15 Uranium Mine Site Preparation licence and the
16 Cigar Lake Mining Corporation has requested that
17 its current licence be revoked.

18 The scope of the duties proposed
19 is the same as that reviewed and accepted by CNSC
20 staff in CMD 01-H14. It involves the care and
21 maintenance of an underground test mine and
22 supporting facilities. The scope of the duties
23 includes the possibility of further test work on
24 mining methods.

25 The Cigar Lake Mining Corporation

1 applied for and the Commission approved an
2 application for Uranium Mine Site Preparation
3 licence in July 2001. To formalize the intent to
4 abide by all of the commitments, policies,
5 programs and procedures identified by the Cigar
6 Lake Mining Corporation in their application and
7 evaluated in CMD 01-H14, Cameco Corporation has
8 revised and resubmitted Cigar Lake Mining
9 Corporation's application document in support of
10 the current application to become the licensed
11 operator.

12 The revisions Cameco made to Cigar
13 Lake Mining Corporation's application were
14 highlighted to facilitate CNSC staff's review of
15 the changes. The changes include the following:
16 wording changes to replace Cigar Lake Mining
17 Corporation with Cameco Corporation as the
18 operator; organization and management information
19 replacing Cigar Lake Mining Corporation
20 information with Cameco Corporation's information;
21 and environmental and safety policies replacing
22 Cigar Lake Mining Corporation's policies with
23 Cameco Corporation's environment and safety
24 policies.

25 In the opinion of CNSC staff, the

1 changes do not alter the scope of the project or
2 the level of the commitment previously considered
3 and approved by the Commission. Cameco's proposed
4 organization and management of the Cigar Lake
5 Project relies heavily on the use of Cigar Lake
6 Mining Corporation personnel. So experience and
7 continuity will be maintained. Cameco's
8 experience in uranium mining and milling,
9 especially with high grade ore is viewed to be a
10 beneficial asset.

11 CNSC staff concludes therefore
12 that Cameco is a competent operator and will have
13 the requisite experience and management structure
14 in place to properly manage and maintain the
15 facilities at the Cigar Lake Project.

16 CNSC staff has also evaluated the
17 implications of the change of operator in terms of
18 the Canadian Environmental Assessment Act
19 requirements and concluded that although there is
20 a trigger, that pursuant to section 3 and
21 section 2 of Schedule 1 of the Exclusion List
22 Regulations, an environmental assessment is not
23 required.

24 Two licence conditions will be
25 brought forward from the Cigar Lake Mining

1 Corporation licence as follows: Cameco will be
2 required to maintain the current financial
3 assurance and by March 1, 2001 provide an updated
4 decommissioning plan and financial assurance, and
5 two, Cameco will be required to continue the
6 efforts begun by the Cigar Lake Mining Corporation
7 to complete a quality assurance program that
8 complies with the requirements of the Nuclear
9 Safety and Control Act and Regulations.

10 CNSC staff recommends that the
11 Commission accept CNSC staff's assessment that:

12 (a) the applicant is qualified to
13 carry on the activity that the licence will
14 authorize, and will make adequate provision, in
15 carrying on that activity, for protection of the
16 environment, the health and safety of persons and
17 the maintenance of national security and measures
18 required to implement international obligations to
19 which Canada has agreed;

20 (b) accept the CNSC staff's
21 assessment that pursuant to section 3 of the
22 Exclusion List Regulations and section 2 of
23 Schedule 1, Part 1 of the Exclusion List
24 Regulations, an environmental assessment pursuant
25 to the Canadian Environmental Assessment Act is

1 not required;

2 (c) consider issuing the proposed
3 Uranium Mine Site Preparation licence to Cameco
4 Corporation for a period of 31 months; and

5 (d) consider revoking Cigar Lake
6 Mining Corporation's current Uranium Mine Site
7 Preparation licence.

8 CNSC staff is available to provide
9 any further clarification the Commission may
10 require on the basis of the recommendation for the
11 issuance of a licence to the Cameco Corporation
12 for the Cigar Lake mining facility.

13 Thank you.

14 THE CHAIRPERSON: Thank you very
15 much.

16 The floor is now open for
17 questions from the Commission Members.

18 Mr. Graham.

19 MEMBER GRAHAM: Just for
20 clarification, the employees at Cigar Lake, up
21 until this application they were part of Cameco
22 organization or COGEMA or were they neither one?

23 MR. JARRELL: It was a separate
24 company.

25 MEMBER GRAHAM: Separate company.

1 They were not part of either of those
2 organizations. It was a separate company.

3 Are all of the employees that work
4 at Cigar Lake now been transferred to this new
5 organization?

6 MR. JARRELL: I think our words
7 were that the majority would. I don't think that
8 we are in a position to say that all will, but
9 certainly the majority will.

10 MEMBER GRAHAM: Then my question
11 really is, if they are not, that is one thing.
12 But if they are not, will they be replaced -- I
13 mean will you have less staff and try and run a
14 more efficient operation or will you be running it
15 with the same positions?

16 MR. JARRELL: I would offer two
17 comments. One, I would say that let's remember
18 that this isn't a care and maintenance mode. The
19 prime function is design and accordingly there
20 will have to be a design team. As we start to get
21 into the detailed design, the team will have to
22 build up to do that design to propose for the
23 construction application.

24 As far as site maintenance goes,
25 that should be stable. That will be basically a

1 stable operation.

2 MEMBER GRAHAM: The financial
3 assurances, I was trying to think back, the
4 financial assurances were specific to Cigar Lake
5 and they were in the form of a bank letter of
6 guarantee?

7 MR. JARRELL: As I understand it,
8 there was a series of letters of credit from all
9 the owners so that doesn't really materially
10 effect that. What is required here is that upon
11 licence transfer or I should say licence change is
12 a requirement that those letters of credit reflect
13 the fact that Cameco is the operator. But the
14 actual letters of credit are issued by the owners.

15 MEMBER GRAHAM: So they are not
16 issued by a bank. They are issued by the owners?

17 MR. JARRELL: Well, I should
18 correct that. Yes.

19 MEMBER GRAHAM: No, I mean there
20 is a difference and what I guess I'm saying is are
21 we going to have the same security under the new
22 licence as we have had in the past in the form --
23 and I mean --

24 MR. JARRELL: Yes.

25 MEMBER GRAHAM: -- specifically in

1 the amounts of money, and I forget what it was.
2 Can you help us out CNSC staff how much that was?

3 MR. PEREIRA: Ken Pereira
4 replying.

5 Yes, we will have the same
6 guarantee in place and the amount is \$4.21 million
7 issued by letters of credit.

8 MEMBER GRAHAM: Of course there
9 has to be other licensing procedures as you go
10 along, but will the 4.21 or whatever it was, the
11 four million plus be sufficient as we go into the
12 next stage?

13 MR. PEREIRA: I will ask
14 Mr. McCabe to elaborate.

15 MR. McCABE: Yes, Rick McCabe.

16 No, we will be reviewing the
17 financial assurance with the development of the
18 construction license. At that stage, as we say,
19 when there is major changes in the project. But
20 for this transfer from Cigar Lake to Cameco, the
21 4.21 is considered adequate. But when we are
22 looking to the future we will be reevaluating
23 that.

24 MEMBER GRAHAM: That next step has
25 to come before --

1 MR. McCABE: Back to the
2 Commission, yes.

3 MEMBER GRAHAM: -- back to the
4 Commission. I realize that. But at the present
5 time the 4.2 because all it is -- all you are
6 really doing is applying for a change in
7 ownership?

8 MR. McCABE: Yes.

9 MEMBER GRAHAM: Yes. Okay. Thank
10 you.

11 MR. PEREIRA: Not a change in
12 ownership; a change in operation.

13 MEMBER GRAHAM: Operation, yes. I
14 meant to say that.

15 THE CHAIRPERSON: Ms MacLachlan.

16 MEMBER MacLACHLAN: Thank you.

17 I guess that begs the question of
18 what happened to the corporate entity known as
19 Cigar Lake Mining Corporation. You have told us
20 what has happened since the owners chose you to
21 manage this or be the operator of Cigar Lake.
22 What has happened to Cigar Lake Mining
23 Corporation?

24 MR. CHAD: The company will be
25 wound up after the transfer of operatorship to

1 Cameco. It was actually a company, the sole
2 shareholders were the owners of the Cigar Lake
3 Project. So it was a special purpose company to
4 operate the project, and after that is
5 relinquished, it will have no other purpose.

6 MEMBER MacLACHLAN: Thank you.

7 THE CHAIRPERSON: Dr. Barnes.

8 MEMBER BARNES: I have just maybe
9 about three short questions.

10 You said this was the second
11 largest high grade uranium deposition. Out of
12 interest, and I may have asked this question
13 before, what is the first one in the world?

14 MR. JARRELL: McArthur River.

15 MEMBER BARNES: Under the planned
16 work you have additional jet boring mining tests.
17 Could you be a little bit more specific what you
18 envisage for this? Is it essentially the extent
19 of mining? Is it new development in a
20 technological sense?

21 MR. JARRELL: I would like to ask
22 Barry Schmitke to answer that question if he
23 wouldn't mind.

24 MR. SCHMITKE: The jet boring
25 mining test commenced in 1991 as John mentioned

1 and has been progressive over a number of years
2 culminating in the 1992 industrial testing of the
3 jet boring method. What would trigger further
4 testing of the jet boring system and method would
5 be a review of the feasibility study depending on
6 market conditions where we would attempt to
7 optimize the jet boring mining method.

8 During the 1992 test, which ran
9 over a period of about six months, that test was
10 primarily used to establish the parameters for the
11 feasibility study. But we did not have an
12 opportunity to optimize the system itself so we
13 could better understand what the future economics
14 of the jet boring system could be. So that is
15 what further testing would involve.

16 MEMBER BARNES: Finally, I wonder
17 once again if the representative from Saskatchewan
18 Labour wish to comment on this one? There is
19 perhaps less need.

20 THE CHAIRPERSON: Dr. Becker,
21 would you like to approach the microphone, please.

22 DR. BECKER: Ernie Becker,
23 Saskatchewan Labour.

24 I don't think I have very much to
25 say. We have, of course, inspected and regulated

1 the Cigar Lake Mine for many years. We have also
2 dealt with Cameco in their mines. In my opinion,
3 they are both good operators and I have no
4 objection to this change.

5 MEMBER BARNES: If I may given the
6 fact that this is a very high grade deposit and so
7 on, do you have any concerns for future -- in
8 terms of the future development and safety of
9 workers?

10 DR. BECKER: Well, in the matter
11 of radiation protection, you are quite correct.
12 This is a high grade mine and certainly we watched
13 and monitored McArthur River very closely because
14 they also had high grade ore that they have dealt
15 with quite successfully. There were some
16 modifications as they got their mining method
17 going, but the results, I think, have been quite
18 good.

19 Certainly, in my opinion, the
20 Cigar Lake ore is comparable and will also require
21 remote methods of handling. You simply cannot put
22 workers into an orebody with that kind of grade.
23 It's possible in places like Cluff Lake where we
24 were also involved where things like remote
25 drilling and remote loading using -- well, I guess

1 you call it the loading jumbo where you could work
2 into grades of, you know, one or two per cent.
3 But when you are talking 20 per cent, we are
4 talking remote mining. So that is what will have
5 to be in Cigar just like it is at McArthur.

6 THE CHAIRPERSON: Dr. Giroux.

7 MEMBER GIROUX: Two questions.
8 First I would like Cameco as the applicant to
9 maybe spell out exactly what are the benefits of
10 the proposed change in terms of safety. There
11 might be other benefits which I am not concerned
12 about, but will safety be managed better after the
13 change?

14 MR. JARRELL: I guess from my
15 perspective as I indicated in my presentation we
16 look towards the site as basically having
17 accountability for environmental safety matters.
18 The structure that exists at Cigar Lake is very
19 similar to the approach at our other mines and I
20 expect that would continue.

21 Where one advantage possibility
22 would be is that within our corporate group we
23 have two safety professionals. So one could argue
24 there is a bit more sort of in-house support for
25 that safety effort at any specific mine site just

1 by virtue of the fact that we have two safety
2 professionals as well as two health physicists to
3 support them as well.

4 MEMBER GIROUX: Would staff agree
5 with this?

6 MR. PEREIRA: I will ask
7 Mr. McCabe to comment.

8 MR. McCABE: I guess what our only
9 concern, our major concern with regard to change
10 in operatorship would have been had the staff in
11 Cigar Lake not been moved into the Cameco
12 organization. We see this being a test mine
13 development of new equipment, prototype equipment
14 and all of that. There would a been a loss of
15 that expertise.

16 But since that has occurred and
17 the staff has been in transition and the people
18 identified by Cameco being integrated into their
19 operation and with the added engineering strength
20 that they bring, I think that we are very
21 comfortable with this proposed change.

22 MEMBER GIROUX: Thank you.

23 My other question concerns the
24 decisions that you have to make about milling the
25 ore and the sludge at Rabbit Lake and at McClean

1 Lake. I understand there are business decisions
2 there. But for one thing I would like an
3 explanation of the expression you use in your
4 brief of "a toll mill basis" for milling the ore.
5 I would like to understand what this is.

6 And would the decision to go to
7 McClean be a purely business decision because you
8 are partners in the venture and are there -- well,
9 this will come up later I'm sure when you come up
10 for licensing. I don't want to go too far ahead.
11 But I will just leave it at these questions.

12 MR. JARRELL: As you said, this
13 thing will certainly come up many, many times in
14 front of this Commission as we work our way
15 through this process.

16 By toll milling what I essentially
17 meant was the joint ventures make a decision as to
18 which part and which component of the ore will be
19 processed at which mill. So there has to be
20 business arrangements made. There has to be an
21 agreement made between as to which component goes
22 to which site.

23 The current thinking is that all
24 of the ore will go to the McClean Lake mill. But
25 that a portion of what is called this sort of

1 intermediate, this pregnant aqueous it's called,
2 or this sort of leached solution will go to the
3 Rabbit Lake facility for finishing off to this
4 yellow cake concentrate. That is what is
5 currently being contemplated.

6 As you said, as we work our way
7 through this process, first, as far as the Rabbit
8 Lake option, that is certainly a deviation from
9 the original intent of the environmental
10 assessment. So we will have to go through
11 probably an environmental -- well, we will have to
12 go through an Environmental Impact Statement
13 process for that component.

14 As far as the other component,
15 that is still under the original sort of envelope
16 of the original EA. So that will probably, as we
17 envision it now, will require obviously some
18 licence amendments to the COGEMA licence in order
19 to receive that ore but that should be more of a
20 fairly straightforward process.

21 THE CHAIRPERSON: Now, it's the
22 turn of the Chair.

23 I have a series of questions. My
24 first question is just for my information. In
25 terms of the decision to have the Quality

1 Assurance Manager appoint to report to the Chair
2 and CEO, could you tell me the origin of that
3 decision and what was behind that one?

4 MR. CHAD: Well, I think the basis
5 for that was to give that initiative a very high
6 priority for the corporation. With the CEO having
7 a direct line of sight to the person in charge, it
8 gives that profile to the company. We also wanted
9 to make sure that it was clearly understood that
10 it would be involved in everything we do from an
11 operational point of view and would go through the
12 line organization and with the Chair and CEO being
13 directly involved it would ensure that message
14 went out.

15 THE CHAIRPERSON: How in terms of
16 connection with management does that work? How
17 does the executive interact under the Chair and
18 CEO with a Quality Assurance Manager?

19 MR. CHAD: Well, the Quality
20 Assurance Manager has a dotted line reporting
21 responsibility to the VP of Mining and also there
22 would be close coordination between the Quality
23 Assurance Manager and the VP of Environment and
24 Safety.

25 In fact, we have a committee that

1 is similar to the COGEMA committee and it's
2 quality assurance, environmental management system
3 and health and management system steering
4 committee that has met monthly. On that committee
5 would be the CEO, myself, the Senior Vice
6 President Human Resources and Corporate Relations,
7 Mr. Jarrell, VP of Environment and Safety and the
8 Quality Assurance Manager and all the managers of
9 our various operations. That committee would
10 discuss policy matters with respect to quality
11 assurance and implementation issues.

12 THE CHAIRPERSON: Thank you.

13 My next question is with regard to
14 community consultations and this is a question
15 that I asked before to COGEMA in a previous
16 hearing as well. So it will be familiar to them.

17 When the intervenors that we have
18 appearing before us are people that are coming
19 from Saskatoon or Regina and they have concerns,
20 I'm aware of the program that you have in place to
21 communicate with northerners. I'm wonder what
22 kind of program you have in place to communicate
23 with people who are in Saskatoon or Regina as
24 well?

25 MR. JARRELL: I think it would be

1 fair to say it's more limited than our direct
2 neighbours. I think that is a fair statement.

3 I think for our southern
4 neighbours it's done generally more along the
5 lines of sort of specific meetings for specific
6 things. For instance, there was one recently for
7 the Cigar Lake Waste Rock EIS where there was one
8 held in Saskatoon. So it tends to be purpose bill
9 meetings.

10 There is no sort of at present
11 regular liaison with people interested in the
12 projects in the southern part of the province.
13 Our focus has always been sort of on the northern
14 half of the province as far as sort of regular
15 continuity type of consultation. So it is done,
16 more or less, on a case-by-case basis.

17 I would stress again that in this
18 project there is numerous times I think in the
19 future for this to occur as we work our way
20 through this process.

21 THE CHAIRPERSON: I suppose it's
22 just important for me to give a signal when I see
23 before me on the mining projects, intervenors who
24 are asking quite detailed questions of a specific
25 kind. It's always important for me to see if

1 there is a way for us to be resolving that in
2 Saskatchewan rather than in Ottawa if for no other
3 reason than it is hard for them to come and I'm
4 very concerned about the transparency issue. So
5 that is my reason for comment as much as anything
6 else.

7 My last question or maybe it's
8 more of a comment. I think you made a comment
9 about the licence period and that you were
10 comfortable with the expiry date being the expiry
11 date that we had put in place earlier because of
12 the fact that you will probably be back as you
13 activate the -- go into full operations.

14 That said, I would just like to
15 signal that we are interested in -- when we see a
16 lot of licences, we are very cognizant of the fact
17 that we have got mills involved now that are being
18 used by a number of facilities or whatever.

19 The Commission would be open to
20 discussions as you go forward on this to look at
21 how it's best and most efficiently handled by the
22 companies. Our job is safety and care for the
23 environment and people. But we are very
24 interested in doing what we can that is
25 appropriate on the efficiency side as well. So

1 understanding that, that may be an issue as you go
2 forward with mills or whatever.

3 Any comment on that?

4 MR. JARRELL: Yes, I would just
5 add I find that very encouraging. I guess from
6 our perspective on a lot of these projects there
7 is sort of a natural time line and I think there
8 is a natural time line for relicensing. In this
9 particular case, I think this is compatible with
10 that insofar as there is all anticipation that we
11 will put in construction applications sometime
12 during this licensing period.

13 We have in the past made, for
14 example, at Rabbit Lake we have suggested a
15 natural time line is the remaining ore life of
16 Eagle Point. So I'm encouraged to see that. I'm
17 also encouraged to hear that -- I think we all
18 know this is a fairly extensive process and there
19 is certainly some issues I think with respect to
20 how much effort we put in this as opposed to other
21 aspects of our sort of day-to-day business. So I
22 find the fact that there is some flexibility in
23 that very encouraging.

24 Thank you.

25 THE CHAIRPERSON: Thank you very

1 much.

2 Are there further questions?

3 Dr. Barnes.

4 MEMBER BARNES: I just had a
5 couple. One came from an organizational
6 viewpoint. Could you just indicate the role and
7 responsibility of the President in your
8 organizational chart?

9 MR. CHAD: The President is in
10 charge of Fuel Services Division. He also -- the
11 US in situ leach operations also report to the
12 President. Also reporting to the President are
13 the Marketing Departments and Corporate
14 Development. And he sits on, obviously, the
15 management committee and he is also a member of
16 Cameco's Board of Directors.

17 MEMBER BARNES: Maybe just a
18 question perhaps more for staff, but maybe for
19 Cameco too.

20 We are dealing with an industry
21 that has had several decades of experience at
22 handling fairly low grade ores, maybe 4 to
23 6 per cent might be typical in handling that,
24 mining that and having the appropriate safety.
25 Obviously in the very recent past and the coming

1 future with McArthur River and Cigar Lake we are
2 entering an era of at least two of these mines
3 dealing with 20 per cent ore, which is really
4 quite a significant difference.

5 I just wonder whether both
6 organizations, staff and in this case, Cameco, can
7 honestly say that they have the appropriate
8 training of staff and have given full
9 consideration to safety given the very high grade
10 ore that is being considered here?

11 MR. JARRELL: I could offer a
12 couple of comments.

13 I think -- actually I wish I had
14 the plot here with me. But if you actually, for
15 example, look at sort of the dose expended per
16 sort of ton of uranium processed it's actually
17 perhaps a little counterintuitive that high grade
18 mines actually have lower dose than lower grade
19 mines, which I think really just shows essentially
20 that you can through known technology and through
21 remote mining, I think that you can adapt to meet
22 those challenges.

23 I think we recognize that the
24 venture sort of into high grade mining requires a
25 different think, that it requires more emphasis on

1 sort of the health physics of radiation
2 protection. We have certainly tried to beef that
3 up. It's been a very important component of both
4 the design and also an operation of those
5 facilities.

6 I won't sit here and say that it's
7 not without its challenges. But I think so far
8 the experience that we have had the last year and
9 a half would indicate that it is certainly a
10 doable task and we have always said that if we
11 could get sort of a lot of experience under our
12 belts at these high grade deposits, at least we
13 know we could do it. I think we have proven that
14 so far.

15 The challenge for us now is to see
16 if we can translate that to the Cigar -- to the
17 change of mining methods required with Cigar Lake.
18 But I think we have a good template at McArthur
19 River for that.

20 MR. PEREIRA: Ken Pereira here.

21 Over the years mining practices
22 have changed and our regulatory approach too has
23 evolved to respond to the changing expectations
24 and changing needs. We have a very experienced
25 team out in the Saskatoon Office who are involved

1 in the front edge of our compliance activities in
2 regulating these mines. That team is led by
3 Mr. McCabe. I will ask him to comment on how the
4 team has adapted to the new challenges.

5 MR. McCABE: Thank you.

6 Rick McCabe. I guess the changes
7 that we focus now is the design. We are spending
8 a lot more time on the upfront design of the
9 operation and looking at the shielding and all of
10 the radiation protection aspects much greater than
11 we ever did in the past, both from the underground
12 operations and from the mills.

13 I don't want to give you the
14 impression that we treat this lightly. We are
15 very cognizant of the fact that there could be
16 major upset conditions in these mines that could
17 happen. So we are constantly vigilant and looking
18 and inspecting and making sure that all of the
19 principles and the things that are happening and
20 there is not just a long degradation of systems
21 where these upset conditions could occur. We
22 don't treat it lightly.

23 As to the training, I think it's a
24 learn as we go. Most of the people have an
25 extensive background, as you indicated, in the

1 lower grade operations but we have learned a lot
2 as we have progressed through this and with the
3 caveat that we are concerned about a major upset
4 condition, I think we are fairly comfortable with
5 the situation.

6 THE CHAIRPERSON: Dr. Barnes, a
7 further question?

8 MEMBER BARNES: I didn't know if
9 Saskatchewan Labour had any concern from a
10 worker's viewpoint?

11 DR. BECKER: Ernie Becker,
12 Saskatchewan Labour.

13 I agree with Rick that the
14 possibility of an upset, particularly I think
15 radon gas or radon progeny is something that we
16 are all on the alert for. Saskatchewan Labour
17 also keeps an eye on this as well as the CNSC
18 inspectors and I think it's still not the same as
19 a nuclear reactor.

20
21 I also have experience with
22 working in nuclear reactors. The potential there
23 is still much higher. You can get into situations
24 there where things happen very quickly. It's not
25 really the same in the uranium mines. Yes, the

1 grades are higher. The gamma dose rates are
2 higher but there will still be time to react to
3 things like ore spills. It's not like a spill of
4 nuclear reactor fuel.

5 But I agree with you that
6 increased vigilance is necessary and I feel
7 confident that both Saskatchewan Labour and CNSC
8 have the quality of inspectors to assess these
9 things and in many ways the health physics
10 problems, the radiation protection problems in the
11 high grade mines are easier than in a mine like
12 Cluff Lake where you do have to go into the
13 orebody. The remote mining methods have a lot of
14 advantages to them.

15 So, although there is, as Rick
16 McCabe said, that potential for some radon gas
17 release, otherwise the radiation protection is
18 really easier in the high grade mines because you
19 don't have to go into the orebody.

20 THE CHAIRPERSON: Thank you very
21 much.

22 First of all this brings to the
23 end the question period for this hearing. I would
24 like to acknowledge that our contribution from our
25 provincial colleague and as many of your are

1 aware, we are working under an MOU arrangement
2 with Saskatchewan and so we will see more of our
3 Saskatchewan colleagues here as we progress
4 together on working through an MOU arrangement
5 most particularly on the compliance side, which is
6 of course of very great interest to us in the
7 safety area, compliance as well as licensing.

8 So thank you very much to
9 Dr. Becker for that.

10 On that basis, this hearing will
11 continue on the 15th of November here in the CNSC
12 offices. According to the Commission's Rule of
13 Procedure, Rule 18.3, the applicant is required to
14 be present and Commission staff will also be
15 present at that time.

16 The public is invited to
17 participate either by oral presentation or written
18 submission on Hearing Day Two. Persons who wish
19 to intervene on that date must file submissions by
20 October 15, 2001.

21 The hearing is now adjourned to
22 November 15, 2001.