

1           **HEARING DAY TWO**

2           **Cameco Corporation: Application for a licence to**  
3           **operate the Blind River Nuclear Fuel Facility**

4                           THE CHAIRPERSON: The next agenda  
5           item is Hearing Day Two on the application by  
6           Cameco Corporation for a licence to operate the  
7           Blind River Nuclear Facility.

8                           The first day of the public  
9           hearing on this application was held November 15,  
10          2001. The public was invited to participate  
11          either by oral presentation or written submission  
12          on Hearing Day Two. December 14th was the  
13          deadline set for filing by intervenors.

14                          The Commission received four  
15          requests to intervene. The Commission would like  
16          to inform participants that on December 21, 2001,  
17          the Commission received a letter from the  
18          Mississauga First Nation seeking to submit  
19          written comments on this application.

20                          As the letter was received after  
21          the deadline by interventions, the Secretary  
22          informed the Mississauga First Nation that their  
23          comments would not be added to the agenda for  
24          this hearing.

25                          The Notice of Public Hearing

1           2001-H16 was published on September 6, 2001.  
2           Commission Members present for Day 1 of this  
3           hearing included Mr. Graham, Dr. Giroux, Dr.  
4           Barnes, Ms MacLachlan and myself.

5                               Presentations were made on Day 1  
6           by both applicants, Cameco Corporation under CMDs  
7           01-H31.1 and 01-H31.A, and by Commission staff  
8           under CMD 01-H31. The applicant, Cameco  
9           Corporation and the CNSC staff will present  
10          supplementary information today.

11                              With that we will begin with the  
12          oral presentation as outlined in CMD document  
13          01-H31.1B by Cameco staff, and I will again turn  
14          to Mr. Chad.

15

16           **01-H31.1B**

17           **Oral presentation by Cameco Corporation**

18                              MR. CHAD: Good afternoon, Madam  
19          Chair and Members of the Commission.

20                              For the record, I'm Garry Chad,  
21          Senior Vice-President, Law and Regulatory Affairs  
22          and Corporate Secretary of Cameco Corporation,  
23          the proposed licensee.

24                              I'm pleased to be here today in  
25          support of my company's request for renewal of

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1           its operating licence for the Blind River  
2           facilities for a period of five years.

3                       I have with me today, to my left,  
4           Bob Steane, Vice-President of Fuel Services. To  
5           my right is Catherine Green, Manager of our Blind  
6           River operations, who will be making our  
7           presentation today. Sitting behind us from my  
8           right to left are John Jarrel, Cameco's Vice-  
9           President of Environment and Safety; Tom Smith,  
10          Specialist, Environmental Initiatives, and next  
11          is Joe DeGraw, Superintendent, Quality Assurance  
12          at our Blind River Operations.

13                      I will now turn over the  
14          presentation to Catherine Green. We would be  
15          pleased to answer any questions you may have at  
16          the end of our presentation.

17                      Thank you.

18                      MS GREEN: Good afternoon and  
19          thank you. For the record, my name is Catherine  
20          Green, and I am the Manager of Cameco's Blind  
21          River Operations.

22                      This presentation will provide  
23          current updates to the information provided at  
24          the Day 1 Hearing as well as additional  
25          information on the topics which the Commission

1           inquired about at that time, specifically our  
2           Environmental Monitoring Program, emergency  
3           response, fire safety and our five-year outlook.

4                       Operations have been steady and  
5           routine since November and there were no  
6           environmental events. The facility met its 2001  
7           production requirements and routine Christmas  
8           shut down was conducted. Operations restarted in  
9           early January 2002.

10                      We indicated at the Day 1 Hearing  
11           that the same presentation was made in October  
12           and November to the Blind River and Area  
13           Monitoring Committee as well as the Blind River  
14           Mayor and Council. On December 12th, the  
15           presentation was also provide to the Mississauga  
16           First Nation's Chief and counsel.

17                      This presentation was made later  
18           than the others at the request of the Chief as  
19           they underwent elections and a change of officers  
20           in October.

21                      One additional lost time injury  
22           was recorded for 2001. This resulted from an  
23           employee having carpal tunnel surgery for a  
24           repetitive strain injury.

25                      Additional work was also carried

1 out on the preliminary decommissioning plan,  
2 security enhancements and fire safety. As a  
3 general note, we were pleased to be notified  
4 yesterday that the Blind River refinery's  
5 environmental management system has been  
6 registered to ISO 14001. We are confident that  
7 this system will be a tool for us in the process  
8 of continual improvement.

9 Comments were received from the  
10 CNSC on the preliminary decommissioning plans  
11 submitted earlier in 2001. The plan was revised  
12 based on the CNSC's recommendations and it was  
13 resubmitted in December 2001.

14 The earlier plan was revised  
15 extensively to provide a proposal based on state-  
16 of-the-art technology, recognizing the low-level  
17 waste disposal facility is not available to the  
18 site at this time.

19 Illustrated here is the layout of  
20 the Blind River site. The proposed engineered  
21 burial mound would be located on the east side of  
22 the current site which using the mouse is right  
23 here.

24 It measures approximately 200  
25 metres long, 80 metres wide and six metres in

1 height.

2 The Environmental Monitoring  
3 Program is both reviewed and periodically  
4 assessed by the CNSC staff and was of interest to  
5 the Commission at the last hearing. There were  
6 three appraisals done in the last 11-year period  
7 by the CNSC and they focused on source  
8 monitoring, principally stack commissions and  
9 liquid effluent.

10 Liquid effluent is monitored and  
11 then discharge batch wise into Lake Huron through  
12 a diffuser that is located approximately 500  
13 metres from the shore. The diffuser ensure 100-  
14 fold dilution of the effluent at the point of  
15 discharge.

16 The table on this slide  
17 illustrates the average and maximum values for  
18 the parameters measured in the liquid effluent  
19 which is at end of pipe. Compared to provincial  
20 MISA requirements, all results are well under  
21 these limits except for total suspended solids.  
22 This parameter is well under control for  
23 operations-based solids, however, the batch and  
24 exposed lagoon storage configuration provides an  
25 environment that is very conducive to algae

1 growth and this contributes to the elevated  
2 solids loading.

3 Work is in progress with a  
4 consultant to address the handling of the less  
5 than 10 micron-sized algae content without  
6 compromising the quality of effluent from a  
7 toxicity point of view.

8 This table also illustrates the  
9 effects of the diffuser on final effluent quality  
10 and how these values compare to the Canadian  
11 Water Quality Guidelines for the protection of  
12 aquatic life. Again, all parameters are well  
13 under the guideline maximums.

14 The data shown in this table  
15 describes the quality of the liquid effluent  
16 compared to CNSC licence requirements for end of  
17 pipe and related to the Canadian Drinking Water  
18 Guideline at the discharge point, past the  
19 diffuser.

20 As in the previous slide, these  
21 results show excellent compliance. One  
22 difference from the previous slide you will  
23 notice is that the CNSC licence limit column here  
24 compares to the first two data columns on the  
25 left and the Canadian Drinking Water Guideline

1 surrogate values compared to the ambient numbers  
2 in the centre two columns.

3 As far as water quality is  
4 concerned, given the low measured concentrations  
5 to date, the focus has been on pollution  
6 prevention and effluent quality control and not  
7 on impact assessment. Very good control of  
8 liquid effluent quality is achieved to meet the  
9 MISA requirements for the specified analytes and  
10 toxicity.

11 The TSS resulting from algae  
12 growth reflects the low toxicity water and work  
13 is in progress to address this with the MOE.

14 The affluent water quality at the  
15 diffuser is well under the Canadian Water Quality  
16 Guidelines which are intended to reflect impact  
17 on aquatic life, thus detrimental impact on  
18 aquatic life is not expected.

19 Our controlled batch discharge  
20 protocol and the diffuser provide additional  
21 measures of protection.

22 Cameco also collects samples of  
23 surface water from Lake Huron in the vicinity of  
24 the diffuser, from the Mississagi River and the  
25 bog area east of the refinery. Samples are

1 typically taken three times per year.

2 This data is routinely reported  
3 in an appendix to the 4th Quarter CNSC Report  
4 every year.

5 Results are similar to those  
6 reported during pre-operational samplings.  
7 Therefore no reason to suggest measurable off-  
8 site impact on surface water is there.

9 Pre-operational monitoring work  
10 showed a sparse clam population and a report  
11 recommended against future sampling to prevent  
12 depletion of the population.

13 There was a relatively sparse  
14 benthic community, thus making it difficult to  
15 distinguish impacts on the benthics whether they  
16 were due to refinery effluent or natural causes  
17 such as excessive sedimentation from the  
18 Mississagi River.

19 No benthic or fish sampling has  
20 been done since the refinery started up in 1983.  
21 Based on our environmental monitoring data,  
22 Cameco does not believe that we are negatively  
23 impacting the local aquatic ecology. We submit  
24 that guidelines would be required for any  
25 expansion of the current program.

1                   A total of 51 soil samples were  
2 collected in 2001. Samples have been collected  
3 every one to four years over the 1983, which was  
4 our year of start up, to 2001 period. The  
5 results are comparable to pre-operational values  
6 with some locations immediately outside the  
7 parameter fence above pre-operational background  
8 levels.

9                   Soil analysis program provides a  
10 wider range of coverage than afforded by the  
11 ambient air samplers.

12                   In this illustration, we show the  
13 map of where the soil sampling takes place. The  
14 area indicated in the centre with the box is  
15 where the operating site is located, and the  
16 stars and the dots with the cross in them  
17 indicate the various sampling spots.

18                   They are marked as either Cameco  
19 or MOE. The MOE are the locations that the MOE  
20 regularly samples, some of which originate from  
21 pre-operation and the same for the Cameco sites.  
22 A number of these were original and pre-  
23 operation, but for both programs they have been  
24 expanded.

25                   There is a site located over here

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1 that is sampled by both Cameco and the MOE that  
2 is considered to be representative of the town.  
3 The balance are within a two-kilometre range.

4 There is one located up in this  
5 area to the north which is at the edge of the  
6 Mississauga First Nation community.

7 As far as the soil data itself is  
8 concerned, the data from 2001 is comparable to  
9 the pre-operational sampling for the top 0 to 2-  
10 inch layer of soil and the 2 to 6-inch layer of  
11 soil. The results do not show an impact on the  
12 lower soil layer, but they do show a very limited  
13 accumulation on the 0 to 2-inch layer.

14 The top of this table indicates  
15 the pre-op and 2001 data for the top soil, 0 to  
16 2-inch values, and the bottom of the table shows  
17 the 2 to 6-inch zone or horizon.

18 The soil results from 2001  
19 continue to show a very low rate of accumulation  
20 which is consistent with the results of the 1999  
21 MOE study and conclusions.

22 In the MOE study, the rate of  
23 accumulation was reported as being below phyto-  
24 toxicity and human effects levels. The Cameco  
25 data from 2001 reflects an accumulation of 0.4

1 ppm uranium per year for the 18 years of facility  
2 operations.

3 The low accumulation of uranium  
4 reflects a trend to lower stack emissions as  
5 illustrated by this plot. The one anomaly in the  
6 plot for 1990 is the result of a single event  
7 related to baghouse operations which has been  
8 reported previously.

9 Monitoring of ambient air is via  
10 four hi-volume air samplers stations, two on  
11 Cameco property and two off-site. The fourth  
12 station, plus continuous staff monitoring and the  
13 soil sampling provide good coverage.

14 The off-site and golf course  
15 location show no increase compared to pre-  
16 operational sampling and the station on licensed  
17 property has low but above background results.  
18 The annual hi-volume data report is reported in  
19 the CNSC's 4th Quarter Report.

20 There are currently 16 monitoring  
21 wells for groundwater in and around the licensed  
22 property. The groundwater flow is southwesterly  
23 with a relatively low gradient. The water table  
24 is relatively shallow.

25 Cameco's corporate hydrology

1 group reviewed Cameco's monitoring programming  
2 2001 and they verified that the monitoring  
3 program is suitable and that the data from the  
4 program shows no upward trend in any of the  
5 monitored parameters since the start of  
6 operations.

7 This suggests good containment  
8 and control of uranium bearing materials and  
9 other chemicals used at the refinery.

10 In the interest of continual  
11 improvement, recommendations were made to enhance  
12 the monitoring program, including the addition of  
13 up to five monitoring wells. Cameco will discuss  
14 recommended enhancements to the groundwater  
15 monitoring program with CNSC staff as changes are  
16 planned.

17 In this diagram you see in the  
18 centre, where the box is located, the licence  
19 site. You can see to the north there is an array  
20 of sampling wells and at the point where the  
21 groundwater pass the refinery and there are  
22 sampling locations inside and at the edge of the  
23 site.

24 The five recommended additional  
25 sites are here to here to in the centre of the

1 facility and one at the east side.

2 As far as environmental reporting  
3 is concerned, data is published in the CNSC  
4 quarterly report and they are shared with the  
5 Town of Blind River, the Mississauga First Nation  
6 and with the Blind River and Area Monitoring  
7 Committee. Copies of the quarterly reports are  
8 available to the public at the town office.

9 Provincial MISA data, as well as  
10 data reported under the NPRI program are also  
11 publicly available.

12 As far as emergency response is  
13 concerned, Cameco has an emergency response plan  
14 which addresses both on and off-site response.  
15 This plan was updated in 2001.

16 By definition, off-site means  
17 both response to off-site incidents, for example  
18 in our cases transportational related ones, and  
19 the impact of an on-site incident which has an  
20 impact off property.

21 The transportation emergency  
22 response plan was approved by Transport Canada in  
23 2001.

24 Based on our location and  
25 accident scenario modelling, only the golf course

1 was identified for immediate and direct telephone  
2 notification of the public in the event of an  
3 emergency.

4 In addition, notification  
5 requirements for the community responsible  
6 authorities, the Mississauga First Nation, the  
7 Town of Blind River and the OPP, plus Cameco  
8 regulators, are addressed.

9 The local resources in Blind  
10 River are reflective of a small community. They  
11 include a volunteer fire department for the town,  
12 as well as separately for the Mississauga First  
13 Nation, a local detachment of the OPP and a local  
14 hospital which has acute care facilities.

15 As far as safety is concerned, a  
16 fire safety consultant was hired to review the  
17 remaining actions from the CNSC fire audit and  
18 provide technical assistance on how to best  
19 address them. Their report was received in  
20 December 2001.

21 A status update on the  
22 outstanding actions from the fire safety audit  
23 was prepared and submitted to the CNSC in  
24 December 2001.

25 There were no major deficiencies

1 identified in the CNSC audit at the outset.

2 Work on addressing the minor  
3 remaining actions is in progress. This includes,  
4 as an example, relocation of some drummed  
5 materials, more detailed design calculation  
6 checks and installation of some replacement fire  
7 doors and additional documentation.

8 All outstanding actions will be  
9 completed by the end of the third quarter 2002.

10 For our five year outlook, there  
11 are no significant changes current planned. We  
12 plan to operate within the current 18,000 tonne  
13 per year licensed limit and gradually increase  
14 production from the 11,000 to nominal  
15 14,000 tonne per year level.

16 We will implement the internal  
17 dosimetry program and various formal QA programs.

18 We also plan to upgrade safety  
19 and environmental systems to perpetuate continual  
20 improvement and we will optimize existing  
21 operations for efficiency and investigate new  
22 business opportunities within conversion services  
23 as the market demands.

24 We respectfully submit that a  
25 five-year licence is appropriate for Blind River,

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1 including a mid-license review before the  
2 Commission.

3 As indicated in the Port Hope  
4 presentation, we believe that the regulatory  
5 system is sufficiently flexible to deal with  
6 mid-term changes if required and that segregating  
7 issues specific to amendments from the general  
8 licence activities and renewal would be  
9 beneficial.

10 Thank you for your attention. I  
11 would be pleased to answer any questions that you  
12 may have.

13 THE CHAIRPERSON: Any further  
14 comments, Mr. Chad, before we move forward?

15 MR. CHAD: No, Madam Chair.

16 THE CHAIRPERSON: With the  
17 permission of the Commission Members, I would  
18 like to turn to the CNSC staff for their  
19 presentation before opening the floor to  
20 questions.

21 Ms Maloney.

22

23 **01-H31.A**

24 **Oral presentation by CNSC staff**

25 MS MALONEY: Good afternoon,

1 Madam President and Commission Members. I am  
2 Cait Maloney, Director General of the Nuclear  
3 Cycle and Facilities Directorate.

4 The supplementary CMD before you,  
5 01-H31A on the topic of Cameco's application to  
6 renew the licence for operation of the Blind  
7 River Nuclear Fuel Facility serves two purposes.  
8 It provides information on topics outstanding  
9 from Day 1 of the hearings from the its  
10 application and provides an update on the  
11 response by the licensee to a security order  
12 issued on November 16, 2001.

13 The information it contains does  
14 not affect the conclusions of staff that were set  
15 out in CMD 01-H31, which was presented at Day 1  
16 of the hearing in November 2001.

17 The outstanding topics that are  
18 addressed are as follows:

19 Preliminary decommissioning plan  
20 and associated financial guarantees; fire safety;  
21 staff intentions for reporting on the facility's  
22 performance during the requested licence term;  
23 outlook for changes during the requested licence  
24 term; off-site emergency response and  
25 environmental monitoring.

1                   With me today are Barclay Howden,  
2                   Director of the Uranium Facilities Division, and  
3                   Michael White, Section Head of the Uranium  
4                   Processing Facilities Section within that  
5                   Division. Other staff members are here to answer  
6                   questions as required.

7                   Mr. White will now present the  
8                   CMD.

9                   MR. WHITE: Thank you,  
10                  Ms Maloney.

11                  For the record, my name is  
12                  Michael White and I am the Head of the Uranium  
13                  Processing Facilities Section.

14                  Madam Chair, Members of the  
15                  Commission, my presentation will recapitulate the  
16                  key points of CMD 01-H31.A and the  
17                  recommendations made in CMD 01-H31.

18                  Since Day 1 of this hearing CNSC  
19                  staff has reviewed the revised version of the  
20                  preliminary decommissioning plan submitted by the  
21                  applicant and has come to the conclusion that the  
22                  estimated cost to decommission the facility of  
23                  \$14.6 million is reasonable. The applicant is  
24                  committed to have an appropriate form of  
25                  guarantee for this amount in place by March 1,

1 2002.

2 Accordingly, CNSC staff  
3 recommends that the Commission accept the  
4 proposed guarantee of \$14.6 million and approve  
5 the inclusion of the condition in the licence, as  
6 recommended in the CMD, subject to one change,  
7 namely that the date of the preliminary  
8 decommissioning plan not be specified in the  
9 condition.

10 The reason for this proposed  
11 change is to facilitate the updating of the plan,  
12 should it be considered warranted during the term  
13 of the licence, without having to amend the  
14 licence at that time. This is regarded as a  
15 minor consideration because the preliminary  
16 decommissioning plan is not relied on for  
17 compliance purposes.

18 With regard to fire protection at  
19 the facility, the applicant has completed all  
20 major actions needed to bring it into compliance  
21 with the requirements of the National Building  
22 Code and the National Fire Code.

23 Work is under way to make other  
24 changes needed to achieve full compliance. These  
25 are scheduled to be completed later this year.

1 This timing is acceptable to CNSC staff.

2 CNSC staff will inspect this work  
3 as it progresses and will take any action which  
4 may be warranted in light of the findings from  
5 those inspections.

6 The condition included in the  
7 proposed licence requires compliance with the  
8 National Building Code and the National Fire  
9 Code. CNSC staff believe it would be prudent to  
10 augment the requirements of those Codes with  
11 additional measures derived from the U.S.  
12 National Fire Protection Association  
13 Standard 801.

14 This proposal is being considered  
15 by all the uranium processing facilities'  
16 licensees at this time. CNSC staff is to meet  
17 with them in early February to determine which  
18 provisions of this standard are appropriate to  
19 their facilities and operations and which are  
20 not.

21 CNSC staff recognizes the  
22 Commission's and the public's wish to be kept  
23 informed about the facility's performance as  
24 regards protection of the environment, the health  
25 and safety of workers and the public and the

1 facility itself in the interests of national  
2 security.

3 If the Commission approves a term  
4 of five years for the proposed licence, CNSC  
5 staff will make available a report on the  
6 facility's performance at the mid-term point.  
7 The contents of this report will generally follow  
8 the model set out in the appendix to the CMD.

9 For the record, I should add that  
10 the CNSC staff will carry out regular compliance  
11 inspections and program audits during the course  
12 of the licence term to monitor the facility's  
13 performance.

14 It is reasonably probable that  
15 changes to some aspect to the licensed activities  
16 or to the regulatory requirements will be  
17 warranted during the term of the licence,  
18 whatever its duration. The applicant has  
19 presented its views in this regard.

20 The only development which CNSC  
21 staff anticipates at this time is a possible  
22 amendment of the licence condition to require the  
23 implementation of additional fire safety measures  
24 derived from the U.S. National Fire Protection  
25 Association Standard 801, as referred to earlier.

1                   Other changes may be proposed,  
2 either by the applicant or CNSC staff.

3                   In most instances the effect of a  
4 change is to reduce the risks arising from their  
5 licensed activities. However, it might be that a  
6 change could significantly increase the risk or  
7 be perceived to increase the risk as, for  
8 example, an increase in the production rate.

9                   Any changes of that nature,  
10 together with any changes which constitute an  
11 additional regulatory requirement, will be  
12 reported to the Commission.

13                   The status of arrangements for  
14 dealing with emergency situations was questioned  
15 at Day 1 of this hearing. Since that time, CNSC  
16 staff has confirmed that the applicant has made  
17 suitable arrangements in respect of on-site and  
18 off-site contingencies. The applicant's  
19 emergency plan meets the CNSC's requirements.

20                   In support of this plan, the  
21 applicant meets regularly with the local  
22 emergency measures agencies and organizes  
23 familiarization visits to the facility.

24                   The Town of Blind River has an  
25 up-to-date emergency plan which is in accordance

1 with Ontario provincial standards.

2 The scope and adequacy of the  
3 applicant's environmental monitoring program was  
4 also a matter of interest at Day 1 of this  
5 hearing.

6 The existing program had its  
7 genesis in the early 1980s in relation to the  
8 environmental assessment that was conducted prior  
9 to the construction and commissioning of the  
10 facility. Since then it has been subject to  
11 several reviews by CNSC staff.

12 While its principal purpose was  
13 to monitor and measure sources of radiation  
14 exposure and gather data for estimating doses to  
15 members of the public, the information has been  
16 used for assessing the impacts of the facility on  
17 the environment as well.

18 Uranium releases from the  
19 facility to the atmosphere are relatively low, as  
20 was reported in CMD 01-H31. The data from the  
21 air quality monitoring stations shows that the  
22 uranium concentrations are in the range which was  
23 measured before the facility commenced operation.  
24 At these concentrations it is unlikely that any  
25 harm would result to non-human organisms.

1                   Analysis of soil samples indicate  
2                   that some uranium from releases to the atmosphere  
3                   has been deposited in areas near the facility.  
4                   The concentrations which have been found are only  
5                   slightly above naturally occurring ones and they  
6                   are well below those which may be harmful to  
7                   plants and organisms living in the soil.

8                   Given the limited releases from  
9                   the facility, the rate of accumulation is  
10                  correspondingly low. Concentrations in soil  
11                  would not be expected to reach levels considered  
12                  toxic to either humans or non-human species.

13                  Aqueous effluents from the  
14                  facility are accumulated in lagoons so that they  
15                  can be treated and sampled prior to being  
16                  discharged. The results show that the applicable  
17                  CNSC limits, as set out in the operating licence,  
18                  and the Ontario provincial limits, have been met.

19                  The effluents, post-treatment and  
20                  analysis, are released into the north channel of  
21                  Lake Huron via a pipe which extends about  
22                  500 metres from the shoreline.

23                  The applicant regularly samples  
24                  and analyzes water from the north channel and  
25                  from the Mississagi River which runs to the west

1 of the facility, taken at points upstream and  
2 downstream. The results show little effect due  
3 to the licensed activities at the facility.  
4 Thus, it is considered unlikely that there will  
5 be any adverse effects on aquatic organisms.

6 It is possible, however, that  
7 contaminants in the effluents could accumulate in  
8 sediments. This is an open question because  
9 currently no samples are being taken to monitor  
10 the sediments and organisms living in them.

11 In the absence of relevant data,  
12 CNSC staff are not able to ascertain whether any  
13 effects are actually occurring and the magnitude  
14 of impacts on species which might be affected.

15 To remedy this situation, CNSC  
16 staff considers that an environmental effects  
17 component should be added to the existing  
18 monitoring program. This component would be  
19 designed taking into account the risk to the  
20 environment based on the data currently  
21 available.

22 CNSC staff believes that two  
23 conclusions can be drawn with respect to  
24 environmental protection.

25 These are, first, that the

1 applicant's existing environmental protection  
2 program is effectively preventing unreasonable  
3 risks to the environment.

4 Second, that there is a need to  
5 augment the existing monitoring program to focus  
6 on the environment in its own right by adding an  
7 effects monitoring component.

8 Two changes to the draft licence  
9 attached to CMD 01-H31, which was presented at  
10 Day 1 of this hearing on November 15, 2001, are  
11 proposed at this time.

12 The first of these is to include  
13 the condition on the maintenance of the financial  
14 guarantee to cover the costs of decommissioning,  
15 as set out in the CMD 01-31.A, but without the  
16 reference to the data of the preliminary  
17 decommissioning plan for the reason explained  
18 earlier.

19 The second is to change the date  
20 the documents reference in Appendix B of the  
21 proposed licence. This change is needed because  
22 the applicant submitted revised versions of the  
23 documents in question after the original  
24 CMD 01-H31 was prepared.

25 These documents have been

1 reviewed and accepted by CNSC staff.

2 With respect to the physical  
3 security of the facility, this facility was  
4 considered in Phase 2 of the CNSC staff's  
5 assessment of all licensed activities. It was  
6 subject to the requirements prescribed in the  
7 Designated Officer's Order 01-D1 dated  
8 November 16, 2001.

9 The applicant has fully complied  
10 with those requirements.

11 In conclusion, Madam Chair, I  
12 should like to reiterate the recommendations  
13 which CNSC staff made to the Commission on Day 1  
14 of this hearing in CMD 01-H31. These are as  
15 follows:

16 (a) accept CNSC staff's  
17 assessment that the applicant is qualified to  
18 carry on the activities that the licence will  
19 authorize and will, in carrying out those  
20 activities, make adequate provision for the  
21 protection of the environment, the health and  
22 safety of persons and the maintenance of security  
23 and measures required to implement international  
24 obligations to which Canada has agreed;

25 (b) accept CNSC staff's



1 in any way.

2 MEMBER BARNES: I have another  
3 question related to the monitoring strategies for  
4 the biota. I refer to two of your slides, both  
5 of which have some difficulties.

6 For example, on the slide which  
7 had pre-operational monitoring, you indicate  
8 that:

9 "There was a relatively  
10 sparse benthic community thus  
11 making it difficult to  
12 distinguish impacts on the  
13 benthic community, whether  
14 due to refinery effluent or  
15 natural causes."

16 And then you go on to say that  
17 because it is a sparse clam population, you are  
18 recommending against sampling of it.

19 On the next slide, which was  
20 environmental effects monitoring, you indicate  
21 that:

22 "No benthic or fish sampling  
23 has been done since the  
24 refinery started up in 1983."

25 The next bullet says that:

**StenoTran**

1 "Based on our environmental  
2 monitoring data, Cameco does  
3 not believe we are negatively  
4 impacting the local aquatic  
5 ecology."

6 They seem to be a little at odds  
7 with each other.

8 MS GREEN: Perhaps I can treat  
9 the question in two parts.

10 The assessment of the size of  
11 population of the clams and the benthic  
12 community, that recommendation was made by  
13 consultants to us. So I am referencing a report  
14 and recommendations that were made to us at the  
15 time of pre-operation.

16 It strikes me that to establish a  
17 program, one needs to look at the issue of what  
18 appropriate effects monitoring might be  
19 applicable to the site. But as a second  
20 component of that, it would be important to  
21 consider the effects that the monitoring itself  
22 would have on the community.

23 I don't know how typical it is to  
24 have to consider that.

25 One of the things that is part of

1       our geometry is that we are located at the mouth  
2       of the Mississagi River. The Mississagi River is  
3       part of the Mississagi River dam system, and we  
4       are at the delta. The delta is very sandy and  
5       shifting.

6                       The Mississagi dam system causes  
7       the flow of the river to be quite changeable.  
8       The effect that that has may have something to do  
9       with the extent to which the delta shifts. That  
10      may have some effect on the population that  
11      predated us. In any case, the requirement to do  
12      effects monitoring would certainly need to  
13      consider the effect that the sampling itself  
14      would have.

15                      The answer to the second part of  
16      your question is that we look at the Canadian  
17      Water Quality Guidelines as a measure of  
18      information or a standard that is generated for  
19      the purpose of protecting aquatic life. When we  
20      compare our performance to that, that gives us an  
21      indication of whether we should have a concern,  
22      or we feel that it gives us some measure of  
23      whether we should have a concern and want to look  
24      at measuring effects; about whether they would be  
25      predicted.

1                   MEMBER BARNES:  What are you  
2                   actually measuring, then, in a systematic way, if  
3                   you are not measuring and sampling benthic and  
4                   fish?

5                   MS GREEN:  We are measuring the  
6                   water and comparing that to the guidelines that  
7                   are established to protect aquatic life.

8                   MEMBER BARNES:  So only water.

9                   MS GREEN:  Correct.

10                  MEMBER BARNES:  And you do not  
11                  plan to measure any animal life.

12                  MS GREEN:  On the basis of what  
13                  the CNSC is recommending, I think we are  
14                  certainly prepared to look at what might be  
15                  applicable.  But until now, I am simply reporting  
16                  that we haven't.

17                  MEMBER BARNES:  The low level  
18                  waste mound, this is not in place; right?  This  
19                  is proposed.

20                  When would it be built?

21                  MS GREEN:  At the time of  
22                  decommissioning.  But by virtue of the type of  
23                  operation that we are, typically we receive more  
24                  concentrates that are nominally in oxide form,  
25                  and we ship a pure solid product that is an oxide

1 form.

2 We have a very high level of  
3 recycling of processed chemicals that we use. So  
4 the site itself actually generates very little.

5 We know well, from the 19 years  
6 of operation that we have, what we can reasonably  
7 expect maintaining the kind of operations that we  
8 have now.

9 So we would not expect to have to  
10 implement the use of the mound until such time as  
11 we are decommissioning, which is I would hope  
12 well past the 15 years that Mr. Steane referred  
13 to.

14 MEMBER BARNES: I was surprised  
15 because of the location of that mound and the  
16 positioning of the 16 wells and the five that you  
17 indicated, where the five new ones would be,  
18 where the groundwater flows, although it is weak,  
19 to the southwest, a considerable gap in the  
20 position of the groundwater wells, if you like,  
21 between the quadrant of due south and southwest.

22 In other words, you are not  
23 giving yourself any premound information on flow.  
24 I am surprised that you aren't locating some of  
25 these new wells in that area.

**StenoTran**

1 MS GREEN: I have to confess that  
2 I am not a hydrogeologist. It was for that  
3 reason that we referred the question ourselves to  
4 our hydrogeology people. It was their report  
5 that did the assessment of the effectiveness of  
6 the current program and made those  
7 recommendations.

8 I am afraid I am not in a  
9 position to answer that question. We would need  
10 to get back to you.

11 MEMBER BARNES: Do staff have any  
12 comment on this?

13 MS MALONEY: Subject to  
14 correction from behind me, I believe that we have  
15 not looked in depth at this. It is only a  
16 proposal that is in a preliminary decommissioning  
17 plan. So we would not have spent a lot of time  
18 on the details of that. That would come later  
19 on, as the plan matured.

20 THE CHAIRPERSON: There are some  
21 staff behind you, Ms Green, might want to add to  
22 this.

23 MR. JARRELL: John Jarrell,  
24 Cameco Corporation.

25 Dr. Barnes, when we did that

1 review, we were looking more just for operational  
2 impacts of the refinery, not future thinking for  
3 decommissioning. I think if we actually got  
4 closer to the creation of a mound -- and I would  
5 point out to you that that is just sort of a  
6 preliminary estimate of where we put it -- I  
7 think we would have to start looking at  
8 collecting baseline data, like you collected.

9 The purpose of the thing was to  
10 look at the impact of the refinery, not the  
11 decommissioning aspect.

12 MEMBER BARNES: You have been in  
13 this game long enough to know that getting  
14 baseline data -- we always come to meetings like  
15 this and regret that we don't have baseline data.

16 The example that you have just  
17 given here of not analyzing fish since 1983, I  
18 ask the question: How do you know? One  
19 statement says we don't believe we are having an  
20 impact. On the other hand, you haven't collected  
21 the data of fish or benthos since 1983 for the  
22 refinery.

23 In this case, you are telling us  
24 that there will be a mound. You have located it,  
25 a substantial mound. It has the capacity for

1           contamination. The contamination will follow the  
2           groundwater flow, which is to the southwest.

3                         One would think that one would  
4           want to get baseline data so that once you  
5           implemented that mound, and there may be a plume,  
6           you would have some knowledge of that plume event  
7           against the baseline.

8                         I am just suggesting that it  
9           might be wise to consider the location of these  
10          wells or additional wells so that you have that  
11          prior. If it is in fact 15 years, you have a  
12          little time. It may not be in this round.

13                        Nevertheless, I am surprised at  
14          the location that you have suggested.

15                        THE CHAIRPERSON: Perhaps  
16          Mr. Jarrell wants to further comment on that,  
17          Dr. Barnes.

18                        MR. JARRELL: I take your point.  
19          We understand, I think, that we are going to look  
20          at these environmental monitoring programs again.  
21          I think that is quite clear.

22                        I think over the 20 years I have  
23          looked at these programs we have seen the  
24          pendulum shift from sort of compliance stack  
25          monitoring, discharge monitoring to ambient

1 monitoring and back again. I think we are back  
2 on to sort of the pendulum swinging toward more  
3 ambient monitoring.

4 We have resolved this issue at  
5 the mine sites. We have enhanced environmental  
6 monitoring programs with the staff, and I fully  
7 expect that we will do the same here for both  
8 Port Hope and for Blind River as well. It  
9 appears to me that we are going to embark on some  
10 discussions with the staff as to how to enhance  
11 these programs.

12 The only thing that I would add  
13 is that if we are going to do some additional  
14 sampling that we take a look at the results  
15 before we make this a permanent addition to the  
16 program. I think that would be useful.

17 I think some of the things that  
18 Ms Green was talking about, all we are trying to  
19 do is express that there are some limitations to  
20 these programs.

21 At Blind River I think the  
22 concerns would be the possible influence of the  
23 delta, just in the lack of sort of sparse  
24 populations. In the case of Port Hope, when we  
25 look at the harbour I think we have to look at

1 the fact that there are some historical  
2 contamination issues.

3 So we are going to have to forge  
4 some practical discussions or some practical  
5 compromises with the staff as we go forward.  
6 Thank you.

7 THE CHAIRPERSON: Mr. Graham.

8 MEMBER GRAHAM: I don't want to  
9 belabour it, but in Day 1 we did talk a lot about  
10 aquatic monitoring, and so on, aquatic life. I  
11 realize there has been some information given  
12 here this morning or today regarding sparse clam  
13 population, as an example, and the reasons.

14 I was going to have a question on  
15 was there some historic data on whether the  
16 reason for the sparse clam population had  
17 anything to do with environmental pollution or  
18 anything else, or whether it was because of the  
19 changing delta and other aspects.

20 I can't ask those questions  
21 really now, because I think there are other  
22 overlying reasons.

23 My concern is that you seem to  
24 have in place a lot of good monitoring other than  
25 the aquatic. That seems to be a missing link, to

1 my lay overview. I am not satisfied and I am  
2 asking: What can you do as far as monitoring  
3 aquatic life that you are not doing now to fall  
4 in place with the rest of the monitoring that is  
5 being done?

6 My first would be to Cameco:  
7 What else are they prepared to do?

8 MR. JARRELL: Mr. Graham, I think  
9 probably where we are headed is to do some  
10 sediment quality and perhaps some sediment  
11 toxicity work. Certainly it is a key element of  
12 the studies we have done at the mine sites. So I  
13 fully expect that that is the kind of work we  
14 will do.

15 Whether or not we do any fish  
16 sampling I think is more open to debate. You  
17 would probably get a fairly large range on those  
18 fish as opposed to some of the small lakes or  
19 rivers that we look at; for example, in northern  
20 Saskatchewan.

21 Certainly I think it would be  
22 probably sediment oriented.

23 MEMBER BARNES: Would CNSC like  
24 to comment on that, if they are in concurrence?

25 MS MALONEY: I would like to ask

1 Dr. Thompson to respond, especially looking at  
2 the program design and our assessment of that.

3 DR. THOMPSON: Good afternoon.  
4 For the record, I am Patsy Thompson. I am Head  
5 of the Environmental Protection Section of the  
6 CNSC.

7 In terms of the programs that the  
8 CNSC expects the licensees to put in place, the  
9 approach we have used with all licensees is to  
10 have them design programs that provide  
11 information with which to validate the predicted  
12 or expected environmental effects.

13 We are planning to meet with  
14 Cameco on February 5th to go through what the  
15 regulations require in terms of describing the  
16 environmental effects of their facility on the  
17 environment and then designing an environmental  
18 monitoring program that will confirm that  
19 information.

20 Cameco does have environmental  
21 effects information in terms of predictions that  
22 date to the period where the environmental  
23 assessment was done. They have more than 15  
24 years of operational history in terms of what is  
25 being emitted and what concentrations and what

1 volumes.

2 So there is lots of information  
3 that can be brought in and used to design a  
4 program.

5 Staff also recognizes that  
6 programs have to be designed to take into  
7 consideration site-specific factors, and  
8 certainly at Blind River one of the factors is  
9 the use of a diffuser. The diffuser has  
10 significant environmental benefits in terms of  
11 dispersing the contaminants as they are released  
12 to prevent having significant accumulation of  
13 contaminants over a very short distance, as we  
14 see in places where there is a single pipe  
15 discharge to very small environments.

16 So those environmental benefits  
17 also have the added difficulty that it is very  
18 difficult to define a narrow, spatially limited  
19 zone of impact.

20 All those considerations will be  
21 brought in to properly design the program. We  
22 don't expect programs that are brought in from  
23 other industries or other sites to be applied  
24 without those considerations.

25 Certainly the intent is not to

1 monitor to the extent where monitoring would have  
2 more significant environmental effects than the  
3 actual facility. So those considerations are  
4 certainly valid ones.

5 THE CHAIRPERSON: Dr. Giroux.

6 MEMBER GIROUX: I have two  
7 questions concerning the diffuser which has been  
8 mentioned. That is a question to Cameco.

9 I would like to hear a  
10 description of how the 100-to-one is achieved.  
11 Is that a static diffuser? Is there mechanical  
12 means involved?

13 MS GREEN: It is a static device.  
14 That is correct. We do periodically inspect it  
15 to ensure that it is clear.

16 MEMBER GIROUX: Do you monitor  
17 the amount of dilution that you get? Do you take  
18 measurements?

19 MS GREEN: No, we don't.

20 MEMBER GIROUX: the 100-to-one is  
21 the design value.

22 MS GREEN: That is correct. And  
23 there is no evidence from the sampling that we  
24 have done in the parameters that we are  
25 monitoring that there is anything over

1 background.

2 MEMBER GIROUX: If I may change  
3 lines, I would like to continue my exploration of  
4 the five-year licence proposal and address my  
5 questions to Cameco, as I might have done  
6 earlier, to hear their reaction to the  
7 possibility of submitting a written report at  
8 mid-term.

9 What is your evaluation of  
10 whatever economies might be involved for you in  
11 the five-year licence instead of two years?

12 MR. STEANE: We are supportive of  
13 the idea of submitting a report mid-year,  
14 basically a report card on performance against  
15 the licence.

16 Your earlier question on the  
17 effort and tie-up of resources in preparing for a  
18 report of operations and licence activities, it  
19 would be much less than all of the documentation  
20 and preparation for licensing.

21 We would see great benefit in  
22 that approach and would support what we heard the  
23 CNSC staff recommending.

24 MEMBER GIROUX: Have you  
25 attempted to assess this in terms of person-days,

1 as staff has done?

2 MR. STEANE: No, we haven't. I  
3 was impressed by staff's assessment. We have not  
4 done that.

5 MEMBER GIROUX: Thank you.

6 THE CHAIRPERSON: Ms MacLachlan.

7 MS MacLACHLAN: This is a  
8 question for staff.

9 In Cameco's submission 01-H31.1B,  
10 they have two tables of data there, one collected  
11 by MISA, the other by CNSC. It is indicated that  
12 half of the parameters vary with hardness.

13 I do notice that the pH levels  
14 are slightly elevated in both datasets.

15 What are the effects, if any, of  
16 these relatively elevated levels of pH on the  
17 parameters that are sensitive to hardness,  
18 site-specific?

19 MS MALONEY: I will ask  
20 Dr. Thompson to respond to that question.

21 DR. THOMPSON: The information  
22 presented on the table that is identified as 2000  
23 MISA Data, the parameters that are monitored are  
24 those in the MISA regulations that are required  
25 to be monitored.

1                   The Canadian Water Quality  
2           Guidelines that vary with hardness are the  
3           metals. There is a relationship between hardness  
4           and metal toxicity, because the higher the  
5           hardness the more competition there is between  
6           the metal ions and water hardness. So the metal  
7           cannot cross the cellular membranes and be toxic.

8                   Increased hardness is a benefit  
9           in terms of metal toxicity.

10                   In terms of pH -- it is certainly  
11           the case for copper and nickel, my memory fails  
12           me for zinc, but in general metals tend to behave  
13           the same way -- they tend to be less toxic at low  
14           pH, because at low pH you have more hydrogen ions  
15           that are positively charged also. There is also  
16           competition, then, for binding sites on the  
17           cells. So the more hydrogen ions there are, the  
18           lower the pH, then the lower the toxicity tends  
19           to be because the metal cannot cross the cell  
20           membranes and be toxic.

21                   THE CHAIRPERSON: Ms MacLachlan,  
22           I believe the applicant would like to comment on  
23           that question as well, if you agree.

24                   MS GREEN: Catherine Green from  
25           Cameco.

1                   Just a brief point of  
2 clarification. The data in both of those tables  
3 was generated by Cameco and it is compared to the  
4 MISA requirements and compared to the CNSC  
5 requirements.

6                   MEMBER MacLACHLAN: This is a  
7 question for Cameco.

8                   I know that we have talked about  
9 the groundwater -- the location of the bore holes  
10 for the groundwater monitoring. I go back to  
11 what you showed us on the screen, but it seemed  
12 to me that the existing bore holes were all  
13 outside of the perimeter of the property and the  
14 five new bore holes would all be either within  
15 the property or immediately adjacent to the  
16 boundary.

17                   I was just wondering why that was  
18 the case. What were the reasons leading up to  
19 the recommendation that Cameco made to the Blind  
20 River facility to have bore holes on -- one, an  
21 increase in the number of bore holes for  
22 monitoring and, two, why those locations? Is  
23 there a problem? Is there an issue giving rise  
24 to the increase in the number of bore holes for  
25 monitoring?

1 MS GREEN: If I may, I'm not sure  
2 if it is possible to display again.

3 In this illustration the bore  
4 hole locations that are easier to see on the  
5 diagram are indeed outside the perimeter, but  
6 there are in fact a number of locations within  
7 the licensed facility.

8 This group in particular is  
9 located right at the point where the uranium ore  
10 concentrate storage is located, right at the  
11 storage pads.

12 MEMBER MacLACHLAN: Are those  
13 locations current locations?

14 MS GREEN: That is correct.

15 MEMBER MacLACHLAN: I see.

16 MS GREEN: All of the locations  
17 shown on this diagram are current ones.

18 MEMBER MacLACHLAN: I see. When  
19 I saw you move the cursor earlier, I thought  
20 those were the locations of the five new ones.

21 MS GREEN: No.

22 MEMBER MacLACHLAN: Where are the  
23 five new ones?

24 MS GREEN: There would be one  
25 here, one here, one approximately in this area,

1 here and one here. So two to the west, two  
2 centre south, two southwest, two centre south and  
3 one southeast.

4 MEMBER MacLACHLAN: So they are  
5 all within the perimeter of the property?

6 MS GREEN: That is correct.

7 MEMBER MacLACHLAN: Right. So my  
8 question still stands: What is the rationale for  
9 increasing the number of bore holes and putting  
10 them in those locations?

11 MS GREEN: In the recommendation  
12 they suggested that that would provide us with  
13 more immediate response if there was to be an  
14 incident or spill in this area. But the study  
15 also indicated that there was no evidence that  
16 was the case. It was a suggestion to enhance the  
17 effectiveness of the program.

18 Just for reference, the speed of  
19 passage of groundwater is 18.6 metres per year.  
20 Based on the knowledge of that rate of flow, the  
21 report considered the frequency at which we  
22 sample and in some cases recommended that we were  
23 sampling at higher frequencies than was actually  
24 required.

25 MEMBER MacLACHLAN: Okay.

1 Thank you.

2 This is a question to Cameco.

3 You have an intention to increase  
4 production from the plant. Will that increase in  
5 production be capable of being done within the  
6 existing parameters of the facility or will there  
7 have to be modifications?

8 MS GREEN: Catherine Green from  
9 Cameco again.

10 We are currently operating on a  
11 semi-continuous schedule because we have more  
12 capacity than we require. So we actual cycle  
13 currently through approximately 20 to 25  
14 operating days and then we cycle shutdowns in  
15 operations in order to carry out incoming feed  
16 sampling and other work.

17 So in order to achieve  
18 requirements up to those projected, we simply  
19 need to add more operating days.

20 MEMBER MacLACHLAN: Thank you.

21 Then I have one last question for  
22 staff, and that was with respect to the effects  
23 monitoring plan.

24 I understood from what  
25 Dr. Thompson stated, that the design of the

1 program will be based on an analysis of existing  
2 data collected by Cameco over time, is that  
3 correct, to determine the scope and the nature of  
4 the effects monitoring plan or program?

5 DR. THOMPSON: In terms of the  
6 operational history in terms of emissions data,  
7 yes. As well as some of the environmental  
8 monitoring data is also relevant and will be  
9 brought in in terms of designing the program and  
10 the frequency of sampling and things like that.

11 MEMBER MacLACHLAN: Then what  
12 will the scope of the environmental effects  
13 monitoring program be? Will it be also looking  
14 at the accumulation of metals and radionuclides  
15 in sediments? Will it be addressing off-site  
16 monitoring in soils and water? What will the  
17 scope be?

18 DR. THOMPSON: Generally what is  
19 required is that the licensee normally proceeds  
20 to put together the information on emissions,  
21 what is being emitted in what concentrations, at  
22 what rate, as well as with knowledge of the  
23 environmental fate of those contaminants in what  
24 environmental media they will tend to move to.

25 This information then allows us

1 to determine whether most of the contaminants  
2 will be deposited close to the facility or at a  
3 distance, whether they will be in soils mainly  
4 or -- so this information that is used to  
5 determine what would be monitored at what  
6 frequency.

7 Certainly from the information we  
8 have available the potential accumulation of  
9 contaminants in sediment seems to be an issue.  
10 There are mechanisms to monitor sediment even  
11 when sediment is scarce. There are possibilities  
12 of monitoring suspended particulates for example,  
13 so there are mechanisms to do that. One would  
14 have to look at feasibility, availability of  
15 media, as well as the distances from the diffuser  
16 to really choose the proper design and location  
17 of --

18 MEMBER GRAHAM: I didn't want to  
19 interrupt but I just want to clarify because it  
20 is on the record. The official from Cameco said  
21 that he was in agreement with mid-year reporting.  
22 I think he must have meant mid-term, was it, or  
23 was it mid-year reporting? That is the only  
24 thing I wanted to clarify.

25 MR. STEANE: Thank you. Yes, I

1 did mean mid-term. Thank you.

2 MEMBER GRAHAM: That is all the  
3 questions I had.

4 THE CHAIRPERSON: Ms MacLachlan.

5 MEMBER MacLACHLAN: In the  
6 presentation for Cameco and Blind River there was  
7 a slight clarification possibly with respect to  
8 whose National Fire Prevention Association  
9 Standard was being referred to. I understood  
10 from Mr. White that was a United States standard,  
11 a standard in the United States as opposed to in  
12 Canada. So while it is useful, it is not a  
13 standard that has to be adhered to here in  
14 Canada?

15 MR. WHITE: Thank you, Madam  
16 Chair.

17 That is correct, Ms MacLachlan,  
18 it is a U.S. standard that has no legal standing  
19 in Canada. It is being taken as a technical  
20 input that we consider.

21 MEMBER MacLACHLAN: Thank you.

22 THE CHAIRPERSON: Thank you very  
23 much for that.

24 We will now move to the written  
25 presentations.

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**01-H31.2**

**Written submission from The Corporation of the  
Town of Deep River**

THE CHAIRPERSON: We will start with the written submission from the Corporation of the Town of Deep River as noted in CMD document 01-H31.2

Do the Commissioners have any comments on this written submission?

There are no comments.

**01-H31.3**

**Written submission from Town of Blind River**

THE CHAIRPERSON: We will now move to the written submission from Town of Blind River as contained in CMD document 01-H31.3.

Do the Commission Members have any comments on this written submission?

There are no comments.

**01-H31.4**

**Written submission from Northwatch**

THE CHAIRPERSON: We will move to the written submission from Northwatch as

1 contained in CMD document 01-H31.4.

2 Do the Commission Members have  
3 comments on this written submission?

4 Ms MacLachlan.

5 MEMBER MacLACHLAN: Three made by  
6 Northwatch.

7 They are addressing the issue of  
8 decommissioning plans and they are recommending  
9 that there be a third party independent review of  
10 cost estimates for implementation.

11 Would CNSC staff people outline  
12 the process that is followed with a licensee in  
13 the generation of the preliminary decommissioning  
14 plan and then the process for finalizing that  
15 plan and its associated financial guarantees?

16 MS MALONEY: Ms Cait Maloney. I  
17 will ask Barclay Howden to address your question.

18 MR. HOWDEN: I will give you an  
19 introduction and then I will ask Richard Ferch to  
20 add additional information if necessary.

21 First of all, I would just like  
22 to provide a clarification between the difference  
23 between a preliminary decommissioning plan and a  
24 detailed decommissioning plan.

25 The preliminary decommissioning

1 plan is essentially a document that demonstrates  
2 the feasibility of the decommissioning of the  
3 facility.

4 We require sufficient detail in  
5 order to understand that the concept is indeed  
6 feasible and that the estimate of the cost of  
7 decommissioning is conservative. So that is a  
8 preliminary decommissioning plan.

9 The detailed decommissioning  
10 plan, on the other hand, is a detailed proposal  
11 that is used for assessing an application for a  
12 decommissioning licence.

13 Because of that difference the  
14 processes are slightly different.

15 For the preliminary  
16 decommissioning plan, it is reviewed periodically  
17 by CNSC staff, such as at every licence renewal  
18 or when a significant change or a change to the  
19 facility is proposed, to ensure that the concept  
20 remains feasible and the financial guarantee  
21 remains sufficient and conservative so that the  
22 conditions of the licence are met.

23 The detailed decommissioning  
24 plan, on the other hand, goes through extensive  
25 CNSC Commission and public review through the

1 environmental assessment process and the CNSC  
2 licensing process.

3 In terms of reviewing the PDP,  
4 preliminary decommissioning plan, we do have  
5 guidelines that have been produced that have been  
6 reviewed internally and externally and we use  
7 those guidelines as criteria for assessing the  
8 quality of the preliminary decommissioning plan.

9 With respect to this particular  
10 one, we have done an initial review of the  
11 revised preliminary decommissioning plan such  
12 that we have been able to make our statement that  
13 we feel the cost estimate is reasonable.

14 However, our staff in Waste and  
15 Decommissioning are doing a more detailed review  
16 right now which is anticipated to be completed  
17 within the next month. At that time we expect to  
18 confirm that the financial guarantee is  
19 sufficient or go back to the applicant with  
20 changes to that.

21 The licence condition as proposed  
22 is written such that it requires the financial  
23 guarantee to be in place, but it doesn't specify  
24 the exact number or the date of the plan so the  
25 staff can then reach an agreement with the

1 licensee on the number for that particular one.

2 We expect that to be done within  
3 the next month, hopefully even before the licence  
4 is issued because this licence expires at the end  
5 of February.

6 We have also said in the CMD that  
7 we would be pleased to come back and brief the  
8 Commission on the issue if you felt that you  
9 wanted to get a further update, otherwise you  
10 probably wouldn't hear too much about it until  
11 the mid-term report, if we were able to get a  
12 five-year licence term.

13 I will ask Richard if he has  
14 anything to add.

15 MR. FERCH: Thank you, Barclay.

16 For the record, I am Richard  
17 Ferch from Waste and Decommissioning Division and  
18 unless you are looking for more in-depth detail I  
19 really have nothing to add to what my colleague  
20 has given you.

21 THE CHAIRPERSON: Dr. Giroux.

22 MEMBER GIROUX: Just following up  
23 on that, we don't see or we haven't seen these  
24 preliminary plans in the past, and I am not  
25 suggesting that we should, but the question is:

1 Are these public documents that intervenors could  
2 have a copy of if they wished?

3 MR. HOWDEN: Barclay Howden  
4 again.

5 Yes, they are available if people  
6 wish to see them, within constraints to security  
7 and proprietary information.

8 MS MALONEY: Perhaps, if I might,  
9 I just wanted to -- it is Cait Maloney.

10 There are two regulatory  
11 documents that have been finalized in this area  
12 on financial assurances and on the  
13 decommissioning plans. Those were available for  
14 public comment during their process and so the  
15 intervenors had the opportunity to comment on  
16 process at that time.

17 THE CHAIRPERSON: Further  
18 questions?

19

20 **01-H31.5**

21 **Written submission from Sierra Club of Canada -**  
22 **Nuclear Campaign**

23 THE CHAIRPERSON: I would like,  
24 then, to move to the written submission from the  
25 Sierra Club of Canada - Nuclear Campaign as

1 outlined in CMD document 01-H31.5.

2 Do the Commission Members have  
3 any comments with regard to this submission?

4 No? Okay.

5 MR. LEBLANC: So this completes  
6 the record for the public hearing on the matter  
7 of an application by Cameco Corporation for a  
8 licence to operate the Blind River Nuclear Fuel  
9 Facility.

10 The Commission will deliberate  
11 and will publish its decision in due course. It  
12 will be posted on the CNSC website as well as  
13 distributed to participants.

14 Thank you.

15 THE CHAIRPERSON: Thank you very  
16 much.

17 We will have a lunch break and we  
18 will be back at -- it is now 1:24, but I think we  
19 will go to 1430. So we will give an hour and six  
20 minutes, as long as people don't think this will  
21 always happen.

22 Thank you very much.

23 --- Laughter

24 --- Upon recessing at 1:25 p.m.