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HEARING DAY TWO

2 Cameco Corporation: Application for a licence to 3 operate the Port Hope Nuclear Fuel Facility 4 THE CHAIRPERSON: We will now 5 more to Item 3 of the agenda which is Hearing Day 6 Two on the matter of the application by Cameco 7 Corporation for a licence to operate the Port 8 Hope Nuclear Fuel Facility. 9 The first day of the public 10 hearing on this application was held on November 11 15, 2001. The public was invited to participate, 12 either by oral presentation or written 13 submission, on Hearing Day Two. 14 December 14th was the deadline 15 set for filing by intervenors. The Commission 16 received eight requests to intervene. The Notice of Public Hearing 2001-H15 was published on 17 18 September 6, 2001. The Commission Members 19 present for Day One of the Hearing included Mr. 20 Graham, Dr. Giroux, Dr. Barnes, Ms MacLachlan and 21 myself. 22 Presentations were made on Day 23 One by both the applicant, Cameco Corporation, 24 under CMDs 01-H32.1, 01-H32.1A, and by the 25 Commission staff under CMD 01-H32.

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1 I note that the applicant, Cameco 2 Corporation and the CNSC staff will present 3 supplementary information today. 4 I would like to begin by calling 5 for the oral presentation by Cameco Corporation 6 as outlined in CMD Document 01-H32.1B and turn it 7 over to Cameco to make the opening remarks. 8 I believe Mr. Chad will do that. 9 10 01-H32.1B 11 Oral presentation by Cameco Corporation 12 MR. CHAD: Good morning, Madam 13 Chairman and Members of the Commission. For the 14record, I'm Garry Chad, Senior Vice-President, 15 Law and Regulatory Affairs and Corporate 16 Secretary of Cameco Corporation. 17 I'm pleased to be here today in 18 support of my company's request for renewal of 19 its operating licence for our Port Hope 20 facilities for a period of five years. 21 I have with me today, to my 22 right, Bob Steane, Vice-President of Fuel 23 Services. As Vice-President of Fuel Services, 24 Mr. Steane is the General Manager of our Port 25 Hope operations, and he oversees the Blind River

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1 operations of Cameco. 2 He will be making our 3 presentation today. 4 To my left is Hess Carisse, 5 Manager, Technical Services at Port Hope. 6 Sitting behind us from right to my left are John 7 Jarrell, Vice-President, Environment and Safety; 8 Tom Smith, Specialist, Environmental Initiatives 9 from our Port Hope operations, and Franko Dobri, 10 Superintendent, Quality Assurance at Port Hope. 11 I will now turn over the 12 presentation to Bob Steane. We would be pleased 13 to answer any questions that you may have after 14 our presentation. 15 Thank you. 16 MR. STEANE: Thank you, Garry. 17 Good morning, Madam Chair, and Members of the 18 Commission. For the record, my name is Bob 19 Steane, and I am the Vice-President of Cameco 20 Fuel Services Division. 21 My presentation this morning will 22 provide an update on relevant activities since 23 the Day One Hearing in November, provide 24 additional information on the subject of uranium 25 and soil, as that was of particular interest to

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1 the Commission at the Day One Hearing, and lastly 2 provide a five-year outlook for the facility. 3 There have not been any 4 significant operating problems in the intervening 5 time. The site met the production targets and 6 there were no environmental events. 7 The third guarter environmental 8 monitoring report was presented to the town 9 through the Protection of Persons and Property 10 Committee of the Town Council. The preliminary 11 decommissioning plan was completed and submitted 12 to the CNSC staff late in December. 13 Implementation of various aspects 14 of the CNSC Security Order 01.D1 continued. 15 There was an inspection of the facility by an 16 individual from the CNSC's Non-Proliferation, 17 Safeguards and Security Division and items raised 18 from this inspection were promptly addressed. 19 Lastly, we presented an Environmental Seminar to 20 a local high school Environmental Club. 21 The preliminary decommissioning 22 plan was revised according to the recommendations 23 and guidance received from the CNSC Commission 24 staff. Essentially, these were to present a 25 practical plan that was doable with sufficient

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1 detail presented in the plan such that it was a 2 stand-alone document that did not require a 3 reader to cross-reference other documents to gain 4 an understanding of the plan. 5 The revised plan recognizes the 6 advent of the establishment of a local low-level 7 reactor waste management facility, and the 8 provision in the design and agreement for this 9 facility for 150,000 cubic metres of Cameco 10 decommissioning waste. 11 This is recognized in the plan by 12 outlining a timeline that will incorporate a 13 significant reclamation of the historical 14 material on the site at the same time as the low-15 level reactive waste initiative is proceeding. 16 The cost of the decommissioning 17 plan is estimated at \$33.8 million. Financial 18 quarantees in the form of an irrevocable Letter 19 of Credit will be submitted to the CNSC on 20 receipt of notification of acceptance of the plan 21 by the CNSC. 22 Now, coming up to the subject of 23 uranium and soil. This is an issue that has been 24 the subject of much discussion with some 25 different interpretations of the data from some

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1 of the tests.

2 I will present this subject in 3 three stages. First, the review of some recent 4 modelling work that has been done to relate plant 5 emissions with soil depositions. 6 Second, a review of the results 7 from the various field tests, more commonly known 8 as the soil plot tests, and finally some 9 conclusions from the information presented. 10 Uranium emissions from our 11 operation mainly come from two sources: The 12 uranium hexafluoride plant in the northwest corner -- I point to it here with this mouse --13 14and the uranium dioxide plant which is located in 15 the south end of the property, here. 16 The emissions are measured and 17 A computer modelling of the emission recorded. 18 data with the wind direction of velocity data for 19 the period of 1996 to 2000 was done to enable a 20 prediction of uranium dispersion and deposition. 21 It can be seen that the prevailing wind ranges 22 from the north-northwest to west-southwest. 23 A comparison of the predicted 24 uranium in air concentration derived from the 25 model with actual measured results from the high-

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1 volume air samplers for this five-year period 2 show guite excellence correlation. 3 Using these derived air 4 concentrations and making some assumptions on the 5 settling velocity based upon the particle size of 6 the dust, the computer models predicted the 7 average uranium deposition rate in milligrams of 8 uranium per square metre per month. 9 These results have been plotted 10 on a map of the area surrounding the plant and 11 are illustrated in isoplots shown on the map of 12 the town. 13 Cameco has sample stations 14 measuring the dustfall and the uranium air 15 concentration at various locations around the 16 This is a picture of, on the left, the facility. 17 dustfall device, and on the right, the hi volume 18 air sampler. There are three hi volume sample 19 stations, one at Location 1, one at Location 5, 20 and one at Location 9. There are eight dustfall 21 sample locations. These are at Locations 1, 2, 22 4, 5, 7, 8, 9 and 10. 23 There are also five soil plot 24 test locations. Two of these are the Ontario 25 Ministry of the Environment's and three of them

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1 are Cameco's. The two MOE sites are at the 2 Marina which is south of Location 7 and the Town 3 Hall which is slightly north of Location 5. The 4 three Cameco plots are at the Waterworks, 5 Location 1, Shuter Street, Location 9, and the 6 Beach, Location 11. 7 The predicted dustfall from the 8 computer model was converted to a predicted change in the uranium and soil concentration by 9 10 assuming that all of the deposited uranium would 11 accumulate in the top-five centimetres of soil, 12 and that there was no removal mechanisms. 13 The total change predicted over 14 the five-year period was determined for each of 15 the soil plot test location. These range from 16 0.17 to 1.59 ppm increase over five years, or 17 0.03 to 0.3 ppm/year depending upon the location. 18 A prediction of the accumulation 19 for 60 years was derived and can be seen in the 20 table. Comparing these with the background of 21 soil concentrations that have been measured at 22 each of these locations shows that uranium 23 concentrations will not rise in any appreciable 24 amount and will be far below any observable 25 effects level. This with the assumption that

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1 there is no removal mechanism during the period. 2 Another item of note is the 3 history of uranium dustfall data. There has been 4 a concerted effort made at the Port Hope facility 5 to reduce uranium emissions and it's clearly 6 illustrated in its 24-year history. 7 Now, coming to the field test. 8 As I mentioned, there are five soil plot tests in 9 the area, two operated by the Ontario Ministry of 10 the Environment and three by Cameco. These were 11 installed to try to differentiate between uranium 12 in the soil from historic waste practices, and 13 that from deposition from current emissions. 14 A typical soil plot test consists 15 of rows of soil plots buried in the soil. Each 16 plot consists of ten rows of three plots. Each year one row of three plots is harvested and the 17 18 soil contained in the plots analyzed. 19 Again, the soil plot locations 20 are shown on this map. Now, the result from the 21 soil plot tests up to 2000 show the following 22 average deposition rates. In looking at these 23 results it was interesting that the uranium in 24 the soil surrounding the test plots is more 25 revealing than the soil plots themselves.

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1 Each year, when the plots have 2 been harvested, a sample has been collected from 3 the soil surrounding the plot area. If one 4 assumes a 50-year period, then the background in 5 the area should approximate the predicted rate 6 times the 50-year period. 7 In fact, with the exception of 8 the Town Hall plot, at none of the test plot 9 locations do the background soil samples agree 10 with what would be predicted from the plot 11 samples. The soil plots are overestimating the 12 accumulation of uranium in the soil. 13 At the accumulation rate of 14 slightly over one ppm/year reported at the 15 Marina, it should not be possible to find any 16 soil in this area less than around 55 ppm, given 17 50 years of deposition and that coupled with the 18 known deposition of historical waste material in 19 that area. 20 Most of the soil plot tests are 21 in areas of known contamination from past waste 22 It would appear that the soil pots practices. 23 are not yet in equilibrium, which was initially 24 projected to happen in the first two to three-25 year period.

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1 Some conclusions. The soil in 2 the plots is increasing, but the reason for the 3 increase is not obvious. What is not known is 4 the mechanisms for the increase. There may be 5 things like resuspension of material in the area, 6 differences in the soil composition from the 7 surrounding soil, and soil mechanics that are not 8 understood. 9 The actual changes over time of 10 the background soil samples is in much closer 11 agreement with the predicted deposition modelling 12 result than the soil plot test. Now, this is consistent with the 13 14 fact that computer modelling is the recognized 15 tool to set standards and monitor environmental 16 compliance. 17 In summary, it is our opinion, 18 based upon the information presented, that the 19 measured soil plot data is overestimating the 20 actual accumulation of uranium in the soil from 21 current emissions from the Port Hope facility. 22 Coming now to the issue of a 23 five-year outlook. There are no significant 24 changes currently planned. We can see production 25 volumes rising as additional CANDU reactors come

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online. Pickering and Bruce are both planning restarting units and as a demand for conversion to uranium hexafluoride increases, this from both a reduction in world inventories as well as the withdrawal of British nuclear fuels from the conversion business.

7 There are a number of activities 8 to implement such as a new internal dosimetry 9 program and the links between the existing Port 10 Hope Quality Assurance Program and the Corporate 11 Quality Assurance Program as it develops.

12 There will be continued 13 improvement in the safety and the environmental 14 systems at the site to perpetuate the continual 15 improvement mandated by corporate policy and 16 ISO 14001 registration.

17 Certainly Cameco will continue to 18 optimize the existing operations and investigate 19 new business opportunities as the market demands.

If a new opportunity presents itself that is outside the scope of the existing licence, then application for a licence amendment would be made. It would be supported by all of the necessary assessment and documentation required for the decision which would vary

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1 depending upon the nature of the change. 2 Again, at this time, no changes 3 of this nature are currently planned. One item 4 mentioned at the Day One Hearing was that the 5 Crane Property Lease is dated to July 1, 2005. 6 The fact around this property is that it is 7 intimately tied into the Port Hope area 8 initiative, and until the environmental 9 assessment being done by the Low-Level 10 Radioactive Waste Management Office is complete, 11 and the construction of a waste management 12 facility is done, little can be done with the 13 property. 14 These activities are currently 15 expected to take five to seven years. This 16 property is specifically included in the Port 17 Hope project description. 18 In the meantime, Cameco is making 19 provisions to relocate our uranium dioxide 20 product storage onto the main site and plans to 21 have this activity completed by mid-2005 to 22 facilitate any options that may present 23 themselves during the clean-up project 24 assessment. 25 We feel in the context of the

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1 five-year licence period a mid-licence 2 comprehensive review before the Commission would 3 be appropriate. This would give the Commission a 4 review of our performance relative to the licence 5 and the public a chance to formally comment. 6 We believe that the regulatory 7 system is sufficiently flexible to deal with mid-8 term changes, if required, and that segregating 9 issue-specific amendments from the general 10 licence activities and renewal would be 11 beneficial. 12 In conclusion, we believe that a 13 five-year licence should be granted. The 14 regulations and regulatory process are such that 15 any item significant enough to require a licence 16 amendment needs to come to the Commission and the 17 public through formal hearings. 18 This is the case whenever the 19 circumstances change which is independent of the 20 licence term. 21 There are a no issues in front of 22 us now that should preclude a five-year term and 23 issuing such a licence would give both the 24 licensee and Commission staff more time to focus 25 on activities other than licensing for a long

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1 period.

2 Thank you. I would be pleased to 3 take questions now or later, as the Commission 4 desires. 5 THE CHAIRPERSON: Thank you very 6 much. 7 Any further comments, Mr. Chad, 8 before...? 9 No, Madam Chair. MR. CHAD: 10 THE CHAIRPERSON: Thank you. 11 With the permission of the 12 Commission Members, before I open the floor for 13 questions to the licensee, I would like to call 14 upon the staff for their presentation. 15 So what I would like to do is, 16 therefore, turn to Ms Cait Maloney. Before you 17 start, Ms Maloney, the Commission would like to 18 acknowledge your new position as Director General 19 of Fuel Cycle & Facilities Regulation, and also 20 congratulate the new Vice-President of 21 Operations, Mr. Pereira. 22 So with said, Ms Maloney. 23 01-H32.A 24 25 Oral presentation by CNSC staff

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1 Thank you very much. MS MALONEY: 2 Good morning, Madam President and 3 Commission Members. I'm Cait Maloney, Director 4 General of the Nuclear Cycle & Facilities 5 Directorate. 6 The supplementary CMD before you, 7 01-H32.A, on the topic of CMD 01-H32.A on the 8 topic of Cameco's application to renew the 9 licence for operation of its Port Hope Nuclear 10 Fuel Facility serves two purposes. 11 It provides information on topics 12 outstanding from Day 1 of the hearings and 13 provides an update on the response by the 14 licensee to the Security Order issued on November 15 16, 2001. 16 The information that it does 17 contain does not affect the conclusions of staff 18 that were set out in CMD 01-H.32, which was 19 presented at Day 1 of this hearing in November 20 2001. 21 The outstanding topics that are 22 addressed are as follows: preliminary 23 decommissioning plan and associated financial 24 guarantee, fire safety, staff intentions for 25 reporting on the facility's performance during StenoTran

1 the requested term, outlook for changes during 2 the requested licence term, off-site emergency 3 response and environmental monitoring. 4 With me today are Barclay Howden, 5 Director of the Uranium Facilities Division and 6 Michael White, Head of the Uranium Processing 7 Facilities Section within that division. Other 8 staff members are also here to respond to your 9 questions. 10 Mr. White will now present the 11 CMD. 12 MR. WHITE: Thank you, Ms 13 Maloney. 14 For the record, my name is 15 Michael White, and I am head of the Uranium 16 Processing Facilities Section. 17 Madam Chair, Members of the 18 Commission, my presentation will recapitulate the 19 key points of CMD 01-H32.A and the 20 recommendations made in CMD 01-H32. 21 Since Day 1 of the hearing CNSC 22 staff has reviewed the revised version of the 23 preliminary decommissioning plan submitted by the 24 applicant and has come to the conclusion that the 25 estimated cost to decommission the facility of

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1 \$33.8 million is reasonable. 2 The applicant is committed to 3 have an appropriate form of guarantee for this 4 amount in place by March 1, 2002. 5 Accordingly, CNSC staff 6 recommends that the Commission accept the 7 proposed guarantee of \$33.8 million and approve 8 the inclusion of the condition in the licence as 9 recommended in the CMD, subject to one change, 10 namely that the date of the preliminary 11 decommissioning plan not be specified in the 12 condition. 13 The reason for this proposed 14 change is to facilitate the updating of the plan, 15 should it be considered warranted during the term 16 of the licence, without having to amend the 17 This is regarded as a licence at that time. 18 minor consideration because the preliminary 19 decommissioning plan is not relied on for 20 compliance purposes.

With regard to fire protection at the facility, the applicant has completed certain of the improvements needed to bring it into compliance with the requirements of the National Building Code and the National Fire Code.

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1 Work is under way to make the 2 other modifications needed to achieve full 3 compliance. These are more substantial in 4 nature, requiring design changes, the procurement 5 and installation of new equipment. They are 6 scheduled to be completed in 2004. 7 This timing is acceptable to 8 CNSC staff. 9 CNSC staff will inspect this work 10 as it progresses and will take any actions which 11 may be warranted in light of the findings from 12 those inspections. 13 The condition included in the 14proposed licence requires compliance with the 15 National Building Code and with the National Fire 16 Code, as mentioned. CNSC staff believe that it 17 would be prudent to augment the requirements of 18 those Codes with additional measures derived from 19 the U.S. National Fire Protection Association 20 Standard 801. 21 This proposal is being considered 22 by all the uranium processing facilities at this 23 time. CNSC staff is to meet with them in early 24 February to determine which provisions of the 25 standard are appropriate to their facilities and **StenoTran** 

1 operations and which are not.

2 The Council of the Municipality 3 of Port Hope, which came into being in January 4 2001 following the amalgamation of the former 5 Town of Port Hope and the Township of Hope, has 6 established a committee to provide advice on 7 matters of environmental concern. The membership 8 of this committee is nine local resident plus one 9 councillor.

10 It should be noted that the 11 applicant has been requested to continue 12 reporting to the Protection of Persons and 13 Property Committee, which is a subcommittee of 14 the Council, rather than this advisory committee 15 however.

16 CNSC staff recognizes the 17 Commission's and the public's wish to be kept 18 informed about the facility's performance as 19 regards protection of the environment, the health 20 and safety of workers and the public and the 21 facility itself in the interests of national 22 security.

If the Commission approves the term of five years for the proposed licence, CNSC staff will make a available a report on the

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1 facility's performance at the mid-term point. 2 The content of this report will generally follow 3 the model set out in the appendix to the CMD. 4 For the record, I should add that 5 the CNSC staff will carry out regular compliance 6 inspections and program audits during the course 7 of the licence term to monitor the facility's 8 performance. 9 It is reasonably probable that 10 changes to some aspect of the licensed 11 activities, or to the regulatory requirements 12 will be warranted during the term of the licence, 13 whatever its duration. The applicant has 14presented its views in this regard. 15 The only development which CNSC 16 staff anticipates at this time is a possible 17 amendment of the licence condition to require the 18 implementation of additional fire safety measures 19 derived from the U.S. National Fire Protection 20 Association Standard 801, as referred to earlier. 21 Other changes may be proposed, 22 either by the applicant or the CNSC staff. 23 In most instances the effect of a 24 change is to reduce the risks posed by the 25 facility. However, it might be that a change

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1 could increase the risk or be perceived to 2 increase the risk as, for example, an increase in 3 the production rate. 4 Any change of that nature, 5 together with any change which constitutes an 6 additional regulatory requirement, will be 7 reported to the Commission. 8 The status of arrangements for 9 dealing with emergency situations was questioned 10 at Day 1 of the hearing. Since that time CNSC 11 staff has confirmed that the applicant has made 12 suitable arrangements for off-site emergency 13 response. 14 The applicant's emergency plan 15 meets the CNSC's requirements. 16 In support of this plan, the 17 applicant is a member of the Port Hope Community 18 Awareness and Emergency Response initiative known 19 This collective of the major industrial as CAER. 20 establishments and operators in Port Hope has 21 implemented a computerized telephone warning 22 system which can be used to make people aware of 23 emergency situations in the community. 24 The municipality's Emergency 25 Response Plan meets the criteria of the essential

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level established under the Partnerships Towards
 Safer Communities program.

We are happy to take note that representatives of Emergency Measures Ontario are present today to provide additional information on this topic should Commission Members so desire.

8 Scope and adequacy of the 9 applicant's environmental monitoring program was 10 of interest at Day 1 of this hearing also.

11 The existing program goes back 12 During the course of its existence many years. 13 it has been subjected to several reviews by CNSC 14 staff. Its purpose was to monitor and measure 15 sources of radiation exposure to provide data for 16 estimating doses to members of the public and, in 17 addition, the fluoride emissions from the 18 facility and concentrations in the air and 19 vegetation.

20 This information has been used 21 for assessing the impacts of the facility on the 22 environment.

The effluents released from the facility to the Port Hope harbour and Lake Ontario comprise primarily cooling water which is

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1 used on a once-through basis. Under normal 2 conditions, barring any leakage from heat 3 exchanges, the composition of the water is the 4 same as that drawn from the lake. The effluents 5 are monitored for contaminants which may come 6 from process operations. 7 The uranium concentrations in the harbour water are such that no harm is likely to 8 9 occur to aquatic organisms. 10 It is possible, however, that 11 contaminants in the effluents could accumulate in 12 This is an open question because sediment. 13 currently no samples are being taken to monitor 14 the sediments and organisms living in them. 15 In the absence of relevant data, 16 CNSC staff are not able to ascertain whether any 17 effects are actually occurring and the magnitude 18 of impacts on species which might be affected. 19 To remedy this situation, CNSC 20 staff considers that an environmental effects 21 component should be added to the existing 22 This component would be monitoring program. 23 designed taking into account the risk to the 24 environment based on the data currently 25 available.

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1 Releases of uranium and other 2 hazardous substances from the facility to the 3 atmosphere are relatively low, as was reported in 4 CMD 01-H32. 5 The data from the air quality 6 monitoring stations shows that the uranium 7 concentrations are low and are unlikely to be 8 harmful to non-human species. 9 The fluoride concentrations are 10 also low, less than the criteria set by the 11 Ontario Ministry of the Environment to protect 12 animals grazing in the local area and thus do not 13 damage vegetation. 14 The accumulation of uranium in 15 soil is of potential significance with respect to 16 the well-being of humans, organisms living in the 17 ground, plants and wildlife due to its toxicity. 18 The significance has to be 19 assessed in terms of the current uranium 20 concentrations, the rate of accumulation and thus 21 the increase in those concentrations and the 22 levels at which harm might be expected to occur. 23 There may be some locations of limited area at 24 which the concentration is greater than these 25 so-called benchmark values.

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1 The information on uranium 2 concentrations at different locations in the Port 3 Hope area is presented in the figure attached to 4 There is guite wide range in these the CMD. 5 values, from the very low number of 6 .07 micrograms per gram of soil to a high of 7 135 micrograms per gram. The average is 8 32 micrograms per gram. 9 The mean rate of accumulation is 10 also highly variable, from 0.01 micrograms per 11 gram a year to 1.29 micrograms per gram per year. 12 Different soil benchmark uranium 13 concentrations have been suggested for different 14purposes. 15 For the protection of human 16 health the value is 1,200 micrograms per gram. 17 For the protection of plants two 18 values have been put forward by different 19 authorities. These are 300 micrograms per gram 20 and 64 micrograms per gram. 21 For the protection of the 22 invertebrates living in soil the value is 23 100 micrograms per gram. 24 Taking those benchmark values 25 into account, CNSC staff has concluded that the **StenoTran** 

1 uranium concentration in the soil is not 2 sufficient currently to cause harm to soil biota, 3 nor would it be expected to do so if uranium 4 continues to accumulate for 100 years at the 5 current rate. 6 CNSC staff believes that two 7 conclusions can be drawn with respect to 8 environmental protection. 9 These are, first, that the 10 applicant's existing environmental protection 11 program is effectively preventing unreasonable 12 risks to the environment. Second, that there is a need to 13 14 augment the existing monitoring program to focus 15 on the environment in its own right by adding an 16 effects monitoring component. 17 Three changes to the draft 18 licence attached to CMD 01-H32, which was 19 presented at Day 1 of this hearing on 20 November 15, 2001, are proposed at this time. 21 The first of these is to include 22 the condition on the maintenance of the financial 23 guarantee to cover the costs of decommissioning, 24 as set out in the CMD 01-32.A, but without the 25 reference to the data of the preliminary

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1 decommissioning plan for the reason explained 2 earlier.

The second change is to require the applicant to maintain the measures which have been established to protect the facility and the nuclear substances on-site as approved by CNSC staff.

8 The third is to change the date 9 the documents referenced in Appendix B of the 10 proposed licence. This change is needed because 11 the applicant submitted revised versions of the 12 documents in question after the original 13 CMD 01-H32 was prepared.

14These documents have been15reviewed and accepted by CNSC staff.16With respect to the physical17security of the facility, this facility was18considered in Phase 2 of the CNSC staff's19assessment of all licensed activities. It was20subject to the requirements prescribed in the

21 Designated Officer's Order 01-D1 dated
22 November 16, 2001.

23 The applicant has complied fully24 with those requirements.

25

In conclusion, Madam Chair, I

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1 should like to reiterate the recommendations 2 which CNSC staff made to the Commission on Day 1 3 of this hearing in CMD 01-H32. These are as 4 follows: 5 (a) accept CNSC staff's 6 assessment that the applicant is qualified to 7 carry on the activities that the licence will 8 authorize and will, in carrying on those 9 activities, make adequate provision for the 10 protection of the environment, the health and 11 safety of persons and the maintenance of security 12 and measures required to implement international 13 obligations to which Canada has agreed; 14 (b) accept CNSC staff assessment, 15 pursuant to section 3 of the exclusion list 16 regulations and section 2, Part 1 of Schedule 1 of those regulations, an environmental assessment 17 18 pursuant to the Canadian Environmental Assessment 19 Act is not required; 20 (c) consider issuing the proposed 21 operating licence FFOL-3631.0/2007 for a period 22 of five years. 23 That completes my presentation of 24 this CMD, Madam Chair. 25 Thank you.

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1 THE CHAIRPERSON: Thank you 2 very much. 3 Any further comments, Ms Maloney? 4 No further comments MS MALONEY: 5 at this time. 6 THE CHAIRPERSON: Before I open 7 the floor for questions, I would just like to 8 acknowledge the presence of officials of 9 Emergency Measures Ontario, the Ontario Ministry 10 of the Environment and the Nuclear Liability and 11 Radioactive Waste area of Natural Resources 12 Canada and thank you for taking the time and 13 coming in for this hearing today. 14 I will acknowledge that questions 15 may be addressed to all or any of these guests as 16 we proceed. 17 With that, I would like to open 18 the floor for questions from the Commission 19 Members to either the applicant or to CNSC staff 20 at this time. 21 Dr. Giroux. 22 MEMBER GIROUX: Thank you. 23 I would like to start by 24 addressing a question to the applicant. 25 You presented to us a graph of **StenoTran** 

1 the computer modelling, the results of computer 2 modelling where you had the isoplots or something 3 of accumulation at the furthest distances from 4 the plant. 5 My question is: This is a 6 computer modelling of course. Did you try to 7 establish a similar graph with actual data as 8 measured in the field and see how the modelling 9 agrees or doesn't agree with the data? 10 MR. STEANE: The computer model 11 was generated using the plant emission data and 12 then the results of that computer model were 13 compared with the field results that we have, 14 which is the high volume air sampling and the 15 dustfall results. 16 That comparison between what the 17 computer was predicting with our experience at 18 those sample locations where we have the data was 19 good agreement. 20 MEMBER GIROUX: Did we see that? 21 Did I miss something? 22 MR. STEANE: Yes, it is in --23 MEMBER GIROUX: I would have been 24 interested -- and this is asking for more 25 information -- but to have the same sort of

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1 presentation for the actual data as for the 2 computer modelling to see how closely they agree. 3 I may have missed something. 4 MR. STEANE: I don't know if it 5 is possible to get the slide on the screen. 6 This is a comparison of the predicted uranium and air concentrations from the 7 8 model with the -- where we have the high volume 9 samplers, which is at those three locations. 10 That is over that five-year period. 11 There was also in there a 12 presentation which compared the results of --13 there is a comparison that was giving, we felt, 14credibility to the modelling. It was in 15 agreement with our field measurements. 16 MEMBER GIROUX: I realize that. 17 I agree, I had seen these results. 18 I was looking for a presentation 19 of the same graphical strategy as isoplot, seeing 20 how close the lines are. It is interesting when 21 you are comparing things to have the same type of 22 presentation as what have here, in columns. 23 MR. STEANE: But the limitation on that is that there is not sufficient field 24 25 data to generate the isoplots.

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1 MEMBER GIROUX: I think that is 2 more like the answer I was wondering about. 3 Thank you for that. 4 Could I address another more 5 general issue of all this source data that we 6 have been presented with? 7 The question that comes to my 8 mind -- and having in mind what we have just been 9 presented by Mr. White about the levels of 10 detrimental effects on humans and biota and all 11 that, and all the numbers we have are quite below 12 that, but then there is great -- as you mentioned 13 of Cameco in your presentation -- uncertainty in 14the models. 15 It appears that the models for 16 measuring accumulation of uranium in soil are not 17 very reliable. As you say, there are some 18 effects which are not taken into account. 19 My question is -- both to you and 20 staff -- is that the right conclusion, that the 21 models are not adequate and, if not, is it 22 worthwhile -- that is the key question -- to try 23 to improve them to get a better fit between what 24 is predicted and what is actually measured in 25 those experimental plots? In view of the level

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1 of the measurements taken, is additional effort 2 warranted to improve the model and get a better 3 fit? 4 MR. STEANE: If I could start the 5 answering on that. 6 I apologize, because I must have 7 not -- my presentation, I think it was the 8 opposite, that the computer models we feel are 9 quite reliable. The uncertainty that we see is 10 in the soil plots. 11 The soil plots, the model is 12 agreeing with our field sampling, it is of hivol 13 and of dustfall. It is not agreeing with these 14 five soil plot locations. Those soil plots in 15 each of those locations, with the exception of 16 the Town Hall plot where the model -- everything 17 does agree, the soil plots are located in areas 18 of known historical waste practices. 19 What we are saying is, we believe 20 that there are mechanisms in soil mechanics, 21 resuspension, things happening at those soil plot 22 locations that are giving rise in those soil 23 plots but is not consistent with what is really 24 happening. 25 The one of particular interest we

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1 really noted was that each year the soil plot 2 pots are harvested and a sample is taken of the 3 surrounding area and those samples of the area 4 surrounding the soil pots is consistent with the 5 model, that is it is not changing appreciably. 6 So something is happening with 7 the soil pots that we don't understand. 8 We think the use of these 9 computer models is well accepted for setting air 10 regulations, air quality regulations and for 11 assessing compliance. The compliance is assessed 12 on the basis of a computer model half-hour POI 13 prediction and so defendable in court. 14 So the models are quite accurate, 15 we think the soil pots are not. 16 MEMBER GIROUX: I will clarify my 17 question. 18 I was referring to a potential 19 model for analysing the soil plots, not about your computer model for looking at dispersion and 20 21 accumulation, but analysing the soil plots. 22 As you say yourself in your 23 presentation, there are some factors there which 24 may be acting which we don't know about which 25 have not been taken into account.

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1 That is my question: Is there 2 much hope in devoting much more energy to 3 understanding what is happening in the soil 4 plots? 5 Maybe staff could respond to 6 that? 7 MS MALONEY: Certainly. I will 8 ask Dr. Thompson to comment on the soil plots. 9 DR. THOMPSON: I will try. I 10 quess this is working now? Just the light isn't 11 on, I'm sorry. 12 For the record, my name is Patsy 13 Thompson and I am Head of the Environmental 14Protection Section. 15 What CNSC staff did was to look 16 at all the soil plot data that has been collected 17 by both the Ontario Ministry of the Environment 18 and Cameco. We chose to only consider the 19 uranium in soil data in the top centimetres 20 because of the uncertainty of movement of uranium 21 between the soil pots and the surrounding 22 environments, with water and other activities 23 that affect uranium movement in soils. 24 The data is presented in the 25 supplementary information CMD.

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1 What we did in addition to that 2 was to look at modelling results of model 3 deposition rates and at the soil plot locations 4 where the highest deposition rates are predicted, 5 we get consistency -- if we use those deposition 6 rates and calculate accumulation rates in soil, 7 we get general consistency with what is being 8 observed in the soil pots. 9 So that sort of gives us an 10 indication that the soil pots, at least in the 11 short term, are in general agreement with 12 deposition rates. 13 The extension we are making is 14 that given the fact that the soil data is quite 15 variable, also given the fact that it is likely 16 that a lot of leaching has taken place over the 17 short period that the pots have been in place, 18 the assumed or predicted accumulation rates over 19 an extended operation period appears to be a 20 conservative estimate, or should be a 21 conservative estimate. It is probably in the 22 high range of what we expect to see over 23 continued operation. 24 So from that point of view the 25 conclusions are that it is unlikely that we will

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1 be having unpredicted or unforeseen accumulation 2 in soils that would potentially cause either 3 effects on people or the environment. 4 In terms of improvement of what 5 is being conducted currently, CNSC staff have 6 given a contract to a consultant to initiate a 7 study focusing on the site-specific information 8 in Port Hope. 9 One of the difficulties we have 10 with modelling results of soil accumulation is 11 that we have little information on the soil 12 characteristics in Port Hope at the different 13 locations. 14 So one of the objectives of the 15 research project that has been initiated -- the 16 project started in November 2001 -- is to look at 17 what can be done to improve what is being done 18 currently to look at the long-term accumulation 19 of uranium in soils. 20 The other objective is to also 21 try to obtain more information on uranium 22 toxicity to invertebrates where we don't have a 23 lot of information. 24 But certainly when the research 25 project is finished, we should be in a better

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1 position to see what can be done to better track 2 that issue over long term. 3 MEMBER GIROUX: What is the 4 timeframe for that contract? 5 DR. THOMPSON: The contract 6 was started in November and it is for a 7 two-year period. 8 MEMBER GIROUX: We have somebody 9 from the Ministry of the Environment for Ontario 10 here. Could we hear your comments about your 11 analysis of the data from the soil pots and 12 whether on the basis of those results the 13 ministry is concerned at the present time? 14MS MORRA: For the record, my 15 name is Laura Morra from the Ontario Ministry of 16 the Environment. 17 I would like to start by 18 apologizing that Dave McLaughlin is not here 19 today. Dave McLaughlin has been the ministry 20 representative for the Port Hope facility for the 21 past, well, 20 or so years. He was not able to 22 attend today. 23 I have been taking over the 24 project since last March. I have looked at the 25 soil data, I have worked with Cameco in

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1 developing the soil data, looking at it, and we 2 are seeing the same trends in the ministry soil 3 plots and the Cameco soil plots. 4 We don't think it is unexpected 5 that the soil variability is as such. We see a 6 lot of variability in our soil sampling 7 throughout the province. 8 Port Hope is a unique situation 9 in that we were unable to find a location that 10 was not historically contaminated, which is why 11 the plots are located where there is historical 12 contamination. 13 The reason why those pots were 14installed the way they are is because we could 15 not find a tract of land large enough to install 16 an in situ soil monitoring site that is available 17 in, like, the Blind River facility. 18 We don't think the accumulation 19 is anything that will be of human health concern. 20 The concentrations are below what would affect 21 the soil, plant -- or the plant biota. 22 We are in the process of 23 developing an air standard, uranium and air 24 standard that is using all of this soil plot 25 data. That standard is in draft form right now.

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1 It will be released later this calendar year for 2 public comment and CNSC can comment on it during 3 that time as well. 4 But, as we see it, the current 5 accumulation is below what would cause a human 6 health concern. 7 Does that answer the question? 8 THE CHAIRPERSON: Dr. Barnes. 9 MEMBER BARNES: I, too, just 10 wanted to follow up on some questions on the soil 11 plot issue. 12 I noticed on page 6 -- perhaps a 13 question to Dr. Thompson: 14 "Therefore potential 15 toxicological effects on 16 non-human biota are the 17 limiting effect for uranium 18 accumulation at Port Hope 19 soils." 20 Yet in the paragraph before: 21 "Toxicity of uranium to soil 22 invertebrates has been 23 studied in a single 24 investigation. 25 So there obviously is very little StenoTran

1 background information on the effects of uranium 2 on soil invertebrates. 3 Is this in total or just in the 4 Port Hope facility, Port Hope area, the single 5 investigation? 6 DR. THOMPSON: The statement that 7 the uranium in soil is limiting for biota is 8 based on the fact that the human health benchmark 9 is above 1,000 and the terrestrial plant 10 benchmark is certainly well below that. 11 There is only one study that was 12 conducted to test the uranium toxicity in soils. 13 That is the only study we have been able to 14locate in quite an extensive literature search. 15 That study essentially -- the 16 controls in that experiment weren't very good, 17 but for the part of the study that was properly 18 designed and for which the data was valid 19 indicates that the toxicity that they measured 20 was at quite a high level. It is quite a bit 21 higher than -- it is about 10 times the 100. 22 So what we did to make sure that 23 we were -- considering the fact that there is 24 only one data point and that some of that work 25 was not -- the quality assurance in that work

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1 wasn't the best it could be, we applied the 2 safety factor on it. So we went from something 3 that would be barely toxic to earthworms at 4 1,000 micrograms per gram, applied the safety 5 factor to bring it down to 100. So with that 6 safety factor we feel pretty confident that the 7 benchmark is protective of biota. 8 But the fact that there is 9 limited data is one of the reasons that this is 10 being dealt with in the research project that 11 staff has initiated. 12 MEMBER BARNES: And the scope of 13 that research project you think is sufficient to 14 give you the answers that you need here? 15 DR. THOMPSON: It is certainly 16 sufficient to give us answers in terms of the 17 soil characteristics in Port Hope that drive the 18 uranium chemistry in soils. The scope is 19 certainly sufficient to collect good quality data 20 on a limited number of soil organisms, but we 21 have made sure that the data we will be acquiring 22 would meet the Canadian Council of Ministers of 23 the Environment requirements when they use such 24 data to develop guidelines. 25 MEMBER BARNES: A question from

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1 me to the Ministry of Environment representative, 2 Ms Morra. 3 I remember the time when the soil 4 plot testing was implemented. Looking back on 5 this, do you still think this is a valid 6 enterprise? 7 Could you also comment on why you 8 think we are getting this overestimation of 9 uranium values? Are we seeing much micro 10 organisms within the actual -- the pots 11 themselves, the artificial ones that contain 12 potting soil? Is it the fact that you perhaps 13 have more clays in here which are absorbing more 14 uranium? 15 MS MORRA: Again, this is Laura 16 Morra for the Ministry of the Environment. 17 We do feel that it is a valid 18 enterprise to do the soil plot study. There 19 aren't that many soil plot studies being 20 conducted in Ontario, aside from Blind River and 21 Port Hope, but it is a valid experiment because 22 it gives you an idea of accumulation in soil from 23 atmospheric deposition and it also gives you an 24 idea of re-entrainment. 25 Now, the bottom of these soil

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1 plots are not lined. They were dug and the pots 2 with potting soil were placed into this 3 entrenched area. There are holes in the bottom 4 of these pots, so whatever uranium may be at the 5 bottom of the soil plot can specifically move up 6 into the pot as well. That is why when these 7 pots are sampled we take the top 5 centimetres 8 and then we sample it at 2 centimetre depth 9 What that allows for is to see what increments. 10 the uranium concentration is in each depth. 11 Now, what we are finding out is 12 that as much as the uranium is accumulating in 13 the surface from atmospheric deposition, we are 14also finding that the uranium concentrations at 15 the bottom of the pot is increasing as well. 16 Now, what will happen over a 17 period of time, we will -- at this time we have 18 an hourglass figure whereby we are having higher 19 concentrations at the top of the pot that 20 decrease and then we are finding higher 21 concentrations at the bottom of the pot moving 22 What we will find over time is that the upwards. 23 pot will be saturated, whereby the soil 24 re-entrainment from the bottom of the pot will 25 eventually meet the soil accumulation from

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1 atmospheric deposition at the top of the pot. 2 So those pots are very 3 important to us in our own kind of modelling 4 experiment over time. 5 As far as over accumulation, we 6 don't really think of it as over accumulation. 7 What we are measuring is atmospheric deposition. 8 That is raw data that comes to us. We have no 9 way of knowing at this time if it is over 10 accumulation. We will, once the study has 11 progressed on in more years. It is very 12 difficult to look at four years of data in these 13 pots to determine a solid answer on that. More 14 study will have to be done. 15 Not very much study has been done 16 in uranium movement in soil and at this point 17 those soil pots are really the only way we have 18 of measuring it. So I can't say at this time 19 that it is over accumulation, it is the only 20 information that we have at this point. 21 MEMBER BARNES: Just to follow up 22 one more question then, in terms of what you now 23 know in terms of the migration rates of --24 potential migration rates down and up within 25 those pots, given that the design of this allows

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you to have 10 years worth of pots, is this going to be adequate? Do you need to redesign that for further recording beyond 10 years?

MS. MORRA: At this point we have to look at the data. We don't have our current five year data yet, unfortunately, but that will give us a good idea because that will be our half way point of the experiment.

9 I have a feeling that the pots 10 may be saturated before 10 years. We may have to 11 redesign it. It is the first experiment of its 12 kind so perhaps the design wasn't the most --13 wasn't the most useful for this type of 14 experiment. Perhaps we needed larger pots, 15 perhaps we needed to use long tubes, different 16 things that could have been done.

17 At this point it seems to be 18 serving the purpose of monitoring of some type of 19 environmental monitoring that allows CAMECO and 20 MOE to work together to collect data. We won't 21 know really what the -- we don't really know 22 about the set up of the study, if it is accurate 23 for this program until the program is complete, 24 unfortunately. It is research. It is the only 25 thing the ministry has to work on.

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1 Because we don't really have this 2 many requests for soil monitoring in this way, it 3 was really the first attempt that was made at 4 soil monitoring. 5 Changes were made for the Blind 6 River facility. That plot was installed later 7 than the Port Hope facility and fortunately we 8 were able to get a track of land large enough 9 where we could sample that over time. It is not 10 a pot study, it is actually an in situ site 11 study. So the process has been amended already. 12 THE CHAIRPERSON: Mr. Graham. 13 MEMBER GRAHAM: Thank you. 14 My questions are not along the 15 same lines, maybe if someone wants to follow up 16 with those first and then I can come back, because mine is with regard to another part of 17 18 the licence. 19 THE CHAIRPERSON: Thank you, 20 Mr. Graham. 21 I think Dr. Giroux has a short 22 follow up question and then Ms MacLachlan with 23 regards to this subject and then I will return to 24 you later. 25 MEMBER GRAHAM: Sure. I think it

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1 would be easier. 2 THE CHAIRPERSON: Thank you. 3 Dr. Giroux. MEMBER GIROUX: Yes, thank you. 4 5 Coming back to Ms Morra, I think, 6 you say the data that you have now has an 7 hourglass figure. 8 Do we understand that the 9 concentrations are the same order of magnitude at 10 the top and the bottom? 11 MS MORRA: No. The 12 concentrations at the top are higher than the 13 concentrations at the bottom. Those pots were 14 clean when they were put in. It was a uniform 15 concentration throughout the product. 16 As we are seeing, over the years 17 the concentration at the bottom is increasing 18 higher than the original concentration. 19 MEMBER GIROUX: Could you give me 20 some data for top and bottom? 21 MS MORRA: Just one moment, 22 please. 23 I do have an overhead if there is 24 capability of showing it. 25 THE CHAIRPERSON: Yes, there is. **StenoTran** 

1 Staff will come back and get it from you. 2 I think this is an important 3 question that needs to be handled. 4 It seems I do not have MS MORRA: 5 the data after all, I'm sorry. I have the 6 re-entrainment data with me. 7 The concentrations are not of the 8 same magnitude at the top of the pot. That 9 information I can forward to you tomorrow, at the 10 earliest. 11 I know Cameco has seen that data. 12 It is showing an hourglass figure 13 in that the concentrations at the bottom are 14 increasing. I don't know when. I can't really 15 predict at this time when the concentrations at 16 the bottom will meet the top. 17 It does show that movement does 18 occur, both from topwards-down and from 19 upwards-up. When we do sample the soil plots, 20 with reference to the other question that was 21 asked before, it is all potting soil. There 22 isn't clay holding uranium particles together. 23 It is potting soil, and there is evidence of 24 earthworm movement within the pots as well. 25 MEMBER GIROUX: I am satisfied,

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1 if I may summarize for my understanding, that you 2 say concentration at the top of the pot is markedly higher than it is at the bottom. 3 4 MS MORRA: Yes, that is correct. 5 MEMBER GIROUX: Thank you. 6 THE CHAIRPERSON: Just to confirm 7 that we will not need then the data. Thank you 8 very much. 9 The applicant has a comment 10 specifically on this subject? 11 MR. STEANE: If I may, Madam 12 Chair. 13 We have the data that is from the 14 Looking at the site, going from the raw data. 15 top to the bottom, I could read out these 16 numbers. 17 The average reported in 0 to 5, 18 5.68; and then 1.88 from 5 to 7; from 7 to 9, it 19 is 1.55; from 9 to 11, it is 1.68; from 11 to 13, 20 it is 1.73; and from 13 to 15, it is 2.40. 21 Then the greater than 17, at the 22 bottom, is 5.45. 23 That was the data from the 2000 24 sampling. 25 MEMBER GIROUX: Could you repeat

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1 the first one on the top? 2 MR. STEANE: Starting again, the 3 average of 0 to 5 is 5.68. 4 MEMBER GIROUX: And you have 5.45 5 at the bottom. 6 MR. STEANE: At the bottom on 7 this table, at the depth called greater than 17, 8 the average is 5.45. 9 MEMBER GIROUX: Thank you. 10 THE CHAIRPERSON: Ms MacLachlan? 11 MS MacLACHLAN: I guess this 12 question is directed to the company in the first 13 instance. 14 When estimates were made on the 15 soils depositions, where were those estimates 16 Were those estimates derived from the derived? 17 model? What statistics were used? 18 MR. STEANE: This is the 19 estimates in the presentation? The estimates 20 were derived from the modelling of five years of 21 plant emission data. Then the model was compared 22 with our field sampling of our air concentration 23 and our dustfall collections for calibration of 24 the model on that same five-year period. 25 The model predictions were then

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1 used to derive an expected soil deposition. 2 Going from an air concentration 3 to a soil deposition, we did a lot of work to 4 measure the particle size of the material being 5 collected in our samples. 6 So with the particle size 7 information, one can calculate settling 8 velocities and derive a dustfall number. 9 MS MacLACHLAN: Thank you. Then 10 I guess the question to both MOE and CNSC staff 11 Would you please comment on the methodology is: 12 used to derive those estimates. 13 MS MALONEY: Perhaps CNSC staff 14 will address that first. 15 I would ask Dr. Thompson to 16 comment. 17 DR. THOMPSON: The atmospheric 18 dispersion modelling that Cameco conducted was 19 reviewed by CNSC staff, because it is the basis 20 from which the derived release limits are 21 established. 22 The atmospheric dispersion 23 modelling was found to be acceptable by staff. 24 Models appropriate for the type 25 of facility and for the number of sources in that

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1 kind of facility were all found to be acceptable. 2 MS MORRA: Again, this is Laura 3 Morra, Ministry of the Environment. We actually didn't have an 4 5 explanation of the dispersion modelling. That is 6 not part of the relationship that we have with 7 Cameco. So I can't really comment on that. 8 THE CHAIRPERSON: I would like to 9 ask my questions with regard to the environmental 10 quality issues before we go to Mr. Graham, with 11 his permission. 12 We have heard a lot about studies 13 that are under way by MOE and by CNSC staff and 14also the company. My question is: Exactly what 15 is the degree of co-operation grosso modo? When 16 we look at the work that is under way and we look 17 at models for scientific investigation, the 18 questions that we are asking as scientists and 19 the work that is under way, is there a 20 co-operation that is under way with the MOE on 21 this? 22 I guess it is a question, to 23 begin with, to CNSC staff. 24 Is there any other work that is 25 being done, either in the United States or

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1 internationally, that would give one a scientific 2 basis upon which to look at either methodology or 3 other accumulations, either in soil or air, that would give us a sense of where this would be 4 5 going? 6 I will start with staff, please. 7 MS. MALONEY: Again, I will ask 8 Dr. Thompson to respond to your question. 9 DR. THOMPSON: The CNSC staff and 10 MOE worked quite closely in terms of the 11 establishment of the soil plots. This was an MOE 12 initiative that the CNSC tracked very closely, 13 because it was an important issue from a 14 regulatory perspective for Port Hope. 15 In terms of what is being done, 16 either nationally or internationally, the 17 Canadian Council of Ministers of the Environment 18 have issued a draft document in which they are 19 proposing uranium soil guidelines for a number of 20 activities. The soil guidelines are intended to 21 protect either human health or the environment, 22 depending on whether they are for industrial 23 sites or park and residential areas or natural 24 environments. 25 That draft uranium guideline

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1 document was issued last year for public comment. 2 The intent from the Canadian Council of Ministers 3 of the Environment is to finalize that document 4 as soon as possible. 5 This will essentially then give 6 us a basis to support the work we are doing and 7 to make it consistent with what is being done 8 throughout the federal government. 9 The CCME is also a 10 federal-provincial initiative, and they have 11 quite an extensive public and peer review process 12 for the documents. So that also ensures a good 13 level of quality to those documents and to the 14 guidelines. 15 THE CHAIRPERSON: Comments from 16 the MOE? 17 MS MORRA: Again, this is Laura 18 Morra. 19 Dave McLaughlin would have a 20 better idea of this, obviously, because he has 21 been involved in this project much longer than I 22 have been. But since I have been around him, and 23 from what I have seen from Dave and Cameco, there 24 has always been a very close relationship between 25 MOE and Cameco working together.

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1 We do an annual vegetation survey 2 together, meaning that I would go with their 3 environmental scientists and we would go to the 4 same spots every year and collect data together, 5 split the samples and share data when it comes 6 available. 7 So there is a very close 8 relationship with Cameco and with the MOE sharing 9 data, doing the projects together, working 10 together. They had a lot of input into our 11 sites. When we developed the plot study, we had 12 input into where the plots were to be located. I 13 am sure in the future it will be the same. 14 As far as CNSC is concerned, 15 because I am new to the project I don't really 16 know the history. But Dave McLaughlin has always 17 been very involved with both the CNSC and Cameco 18 to make sure that the relationship is very close 19 and open. 20 THE CHAIRPERSON: A more specific 21 question for CNSC staff -- and clarify if I have 22 misunderstood this. 23 Was there in your report a 24 comment that there isn't good soil data available on these plots with regard to Port Hope -- basic 25 **StenoTran** 

1 soil data? Is that correct? 2 DR. THOMPSON: That has been one 3 of the difficulties. There has been over the 4 last 20 years -- probably Port Hope is one of the areas where there has been the most extensive 5 6 soil sampling to look at contaminants like 7 uranium, lead, arsenic and the others. 8 Unfortunately, what is usually 9 reported and what is usually available from the 10 agencies that have done this work are the actual 11 contaminant concentrations. 12 The rest of the information 13 related to soil, in terms of soil density, 14 proportion of clay, organic matter, those types 15 of soil characteristics, have not been reported. 16 They are very important in terms of interpreting 17 the data and also being able to improve the 18 models. 19 The models are useful in terms of 20 being able to predict over the long term, and 21 they are also very useful in terms of being able 22 to give us a good understanding of where we 23 should be looking more closely in the 24 environment, such as soil monitoring locations, 25 for example.

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1 That data is missing, and one of 2 the objectives of the research project is to 3 acquire that data for the sites that are more 4 critical in Port Hope. 5 THE CHAIRPERSON: Ms MacLachlan? 6 MS MacLACHLAN: Perhaps 7 Dr. Thompson could comment on the comment 8 provided by MOE that there is very little 9 research that has been done on the movement of 10 uranium in soils. 11 Is that correct? 12 DR. THOMPSON: There are several 13 reports talking about uranium chemistry and 14 uranium behaviour in soil. For example, the 15 absorption characteristics of uranium to soil 16 particles, to clay or organic matter, this kind 17 of thing is quite well studied. That is not 18 where the uncertainty is. 19 However, when you take that 20 generic chemical information or geochemical 21 information and try to use it in terms of 22 assessing specific sites or specific forms of 23 uranium, that is where the difficulty comes in, 24 mainly because we have little information on Port 25 Hope soil characteristics.

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1 The range of information on 2 uranium behaviour in soil is quite broad. So to 3 be able to narrow that range to make it fit the 4 Port Hope situation has been difficult. 5 There has been internationally a 6 lot of work done in using soil columns to look at 7 the behaviour of radionuclides and other 8 contaminants. To my knowledge, there hasn't been 9 the extensive work done for uranium as there has 10 been, for example, for cesium. Cesium has been 11 extensively studied in all types of soil 12 experimental designs. The same effort hasn't 13 been expanded to uranium. 14MS MacLACHLAN: Just one more 15 follow-up question. 16 Is it possible that uranium is 17 indigenous to the soils in Port Hope? 18 DR. THOMPSON: Uranium is found 19 ubiquitously in the environment. The lower 20 levels that are reported in the Commission Member 21 documents do report background concentrations. 22 So uranium is present everywhere in background 23 concentrations. 24 The higher values that are 25 reported for Port Hope are a result of historical **StenoTran** 

1 practices in Port Hope. There is no question 2 that they are not naturally occurring levels. 3 They are the result of industrial operations in 4 Port Hope. 5 THE CHAIRPERSON: With that, we 6 will move to the second line of questioning. 7 I thank Mr. Graham for his 8 Over to Mr. Graham. patience. 9 MEMBER GRAHAM: Thank you. 10 Through the first line of questioning, I thought 11 of one question that I would like to ask, if I 12 may, still on the same topic. 13 Before us we have an application 14 We understand this for a five-year licence. 15 morning, I gather, that there will be increased 16 monitoring, especially in soils and so on; or if 17 not increased, continued monitoring. 18 My question is: If -- and 19 hopefully not, but if there was an increase in 20 contamination, if that level started to rise, 21 where does the flag go up that it comes back to 22 the Commission for information and so on? 23 What I am wondering is: If there 24 is going to be increased monitoring or if the 25 monitoring is going to be more scientific, and so

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1 on, is there a guideline that there is a level, 2 and once it surpasses that, when does it come 3 back? 4 MS MALONEY: I would like 5 Dr. Thompson to start on that one, please. 6 DR. THOMPSON: All the work that 7 has been done and all the data that has been 8 collected by both Cameco, the Ministry of the 9 Environment and the work that we have done 10 indicates that with current emission rates and 11 for predicting over a long period, this is very 12 unlikely to happen. 13 Should it happen, then there are 14 mechanisms in place where we look at licensee 15 compliance with environmental objectives and the 16 emission limits. 17 For uranium to accumulate to a 18 significant level in soils, something would need 19 to happen at the facility to cause the emissions 20 That is where the action levels to increase. 21 would be triggered, and the licensee would take 22 action to make sure that this would not proceed 23 over a long period of time. 24 MEMBER GRAHAM: Thank you. Now 25 to my other line of questioning that I have.

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1 We have learned this morning, I 2 believe, that letters of guarantee or letters of 3 financial guarantees have been set at 4 \$33.8 million. Based on other certain things happening, I believe that is correct; and that is 5 6 construction of facilities to handle 150,000 7 cubic metres of low contaminated soil. 8 First of all, is that correct? 9 MS MALONEY: Barclay Howden will 10 respond. 11 MR. HOWDEN: Yes, the value of 12 the estimate is based on that facility being 13 available. 14 MEMBER GRAHAM: My next question, 15 What is the time frame of that then, is: 16 facility becoming available to ensure that the 17 \$33.8 million is sufficient? 18 If there is a lag of a couple of 19 years in that facility becoming available, then 20 you have to review that. That probably should be 21 in licensing conditions. 22 I would like to hear from you on 23 the time frame. 24 MR. HOWDEN: You are correct that 25 if the facility was not available, it would

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1 change the cost estimate significantly. 2 I would like to call upon Dave 3 McCauley at NRCan to comment on the time frame 4 for that facility. 5 MR. McCAULEY: Thank you very 6 much. 7 For the record, my name is David 8 I am with the Uranium and Radioactive McCauley. 9 Waste Division of Natural Resources Canada. 10 The agreement for the clean-up of 11 Port Hope was signed in March of 2001. It is to 12 proceed in two phases. The first phase is a 13 five-year environmental assessment and regulatory 14review phase that has now begun and is expected 15 to last until 2006. 16 The end point on that process 17 would be an application to the CNSC for a 18 construction licence to build the facility. 19 Assuming that that construction licence is 20 received, we would proceed from then on. The 21 expectation is that the remaining part of the 22 program would last five to seven years. 23 MEMBER GRAHAM: Thank you. 24 Really, before the facility would be completed we 25 are talking approximately 12 years.

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1 Is that correct? 2 MR. McCAULEY: That would be 3 correct. By the time the facility was closed, it 4 could be 12 years. 5 It would be ready for emplacement 6 of wastes in advance of that, however. 7 MEMBER GRAHAM: Approximately how 8 much sooner? If everything went as planned, 9 approximately what date could it start receiving 10 waste? 11 MR. McCAULEY: I don't really 12 have a definitive answer on that. Assuming that 13 we received licence to construct some time in 14 2006, we may anticipate that some two years after 15 that point it would be ready for emplacement of 16 wastes. 17 MEMBER GRAHAM: Thank you. Then 18 my question to CNSC staff is: In view of the 19 fact that this licence application if it is 20 granted for five years, will expire in 2007 and 21 they can only start receiving material in 2008, 22 the \$33.8 million guarantee is all contingent on 23 a facility is being constructed. If not, then I 24 think in your notes you say that it has to be 25 revised upward.

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1 My question is: Should we not 2 ask for a higher amount and then reduce it in the 3 next licensing period in 2007 when the applicant 4 is before us again? 5 MS MALONEY: I will ask Barclay 6 Howden to respond, please. 7 MR. HOWDEN: Right now the 8 facility has given us a five-year outlook and has 9 given no indication that they are going to be 10 planning to decommission the facility in the near 11 future. That is one thing to tell us that there 12 are not plans coming very shortly -- and Cameco 13 can correct me if I am wrong on that. 14 The second thing is the 15 preliminary decommissioning plan and the 16 financial guarantees are reviewed on a regular 17 Two criteria are on licence renewal and basis. 18 when some significant change could occur to the 19 facility or some significant change in plans for 20 the facility. We would use that as a trigger to 21 change the financial guarantee. 22 Our basis right now is that we 23 are not anticipating decommissioning that 24 facility for a long time into the future. 25 By going with the lower figure

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1 Cameco -- I will turn it over to them, and they 2 will probably argue that it all has to do with 3 dealing with their bank for their letter of They prefer to go with the lower value. 4 credit. 5 Right now, we have no indication 6 that they are going to decommission in the near 7 future. 8 MEMBER GRAHAM: Fine. I realize 9 that, because a letter of credit really comes 10 right off your bottom line. 11 My concern to CNSC staff is: Is 12 the \$33.8 million that you have come up with 13 sufficient? Do you feel it is sufficient to 14 cover the period of this licence? 15 I would like MS MALONEY: 16 Dr. Richard Ferch, who has been responsible for 17 the review of the plan, to comment. 18 DR. FERCH: Thank you. For the 19 record, I am Richard Ferch from the Waste and 20 Decommissioning Division at the CNSC. 21 The alternative that you speak 22 of, Mr. Graham, of the site that is presently 23 planned for not being available in Port Hope, if 24 that alternative became unavailable it would be 25 impossible to dispose of waste arising from

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1 decommissioning for an even longer time. There 2 is no way that there would be something available 3 more quickly than that. 4 Therefore, there would be ample 5 time, if that started to develop, to review the 6 situation, to review what the cost would be, and 7 to increase the size of the financial guarantee 8 at that time. 9 MEMBER GRAHAM: Thank you. One 10 question I have for the applicant. The 150,000 11 cubic metres that is mentioned as the amount of 12 low level contaminated soil, is that a scientific 13 figure? Has that been fairly well put together 14 that that is roughly what is required and it will 15 not increase over time? 16 The short answer to MR. STEANE: 17 that question is yes. That number is based upon 18 information that we have on the site and, as 19 well, has contingency provisions in it to allow 20 for errors in estimation. 21 I will ask Tom Smith, our 22 environmental specialist responsible for the 23 development of that plan, to talk a bit more to 24 the contingencies and provisions. 25 MR. SMITH: Thank you. Tom

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1 Smith, Cameco. 2 The projected amount of material 3 that would arise from decommissioning the 4 facility that would have to be managed as low 5 level radioactive waste is estimated at 6 approximately 107,000 cubic metres. 7 As a result, we think that there 8 is sufficient contingency there, given that we 9 have an allocation for 150,000, to deal with 10 anything that might arise on site that we haven't 11 put into our PDP. 12 MEMBER GRAHAM: Thank you. Ι 13 just have one other question to Cameco. 14 What is the life expectancy of 15 the facility that you have there now without 16 doing major modernization or upgrading, and so 17 on? 18 MR. STEANE: I would say that the 19 facility life is at least 15 years. The two 20 operating facilities are relatively new 21 facilities. UF6 was constructed in 1984 and the 22 new south EO2 plant was in the 1970s. There is 23 nothing other than replacement of equipment on an 24 ongoing basis. 25 THE CHAIRPERSON: With

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1 Mr. Graham's concurrence, I would like to give 2 the applicant an opportunity to comment with 3 regard to the costs and the decommissioning plan 4 and costs. 5 I would like your view, if you 6 agree, with regard to the questions that 7 Mr. Graham asked earlier with regard to 8 decommissioning costs and guarantees and plans. 9 MR. STEANE: Again, Bob Steane 10 with Cameco. 11 I concur with the answer from the 12 CNSC specialist. First, we don't have any 13 anticipation of decommissioning, of closing that 14 plant in the near future. 15 The other is that the only 16 disposal facility that is oncoming is the 17 initiative in Port Hope. 18 Further, we do have allocated 19 volumes in that. We have a memorandum of 20 agreement in process with NRCan. There is an 21 agreement between the Government of Canada and 22 the Municipality of Port Hope. Specifically, 23 those volumes are in that plan. 24 We feel that \$33.8 million is 25 robust. We have a lot of contingency in there,

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1 both on volumes and on assessment process. We 2 think that that is a very robust plan to deal 3 with the Port Hope decommissioning. 4 Also, I would point out that this 5 is a preliminary decommissioning plan. It is not 6 the detailed decommissioning plan. But given the 7 nature of the regulations and the requirements of 8 a preliminary decommissioning plan, in the areas 9 of estimation we feel quite good about that 10 \$33.8 million being adequate, more than adequate. 11 THE CHAIRPERSON: Are there 12 further questions? 13 Dr. Giroux. 14 MEMBER GRAHAM: Just as a 15 question to staff, in reading the very last line 16 in one of your notes in the paragraph, it said, 17 in talking about the financial guarantees: 18 We feel that it is not 19 unreasonable and staff 20 recommend that it be accepted 21 on an interim basis. 22 On mechanism on how this works, 23 this \$33.8 million will be in the licence, I 24 presume. 25 What does interim basis mean? Ιf

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1 it is changed, does it come back to the 2 Commission? Or is it just reviewed by staff? 3 MR. HOWDEN: The intention would 4 be that it would be just reviewed by staff. Our 5 expectation is that we would complete our 6 detailed review in about one month's time. 7 THE CHAIRPERSON: Dr. Giroux. 8 If I may, I will MEMBER GIROUX: 9 begin by a follow-up on this question of 10 decommissioning. 11 I have heard all the answers with 12 much interest. The question is: Assuming we did 13 not have the agreement in place for the low level 14 waste, is there a figure for the decommissioning 15 quarantee that would have been required? 16 Is there a feasible scenario for 17 decommissioning without the waste depository? 18 MR. HOWDEN: Barclay Howden 19 speaking. 20 The initial number that was used 21 on the Day 1 CMD was \$60.1 million. 22 I would have to pass the second 23 part of the question to Richard Ferch of the 24 Waste and Decommissioning Division. 25 DR. FERCH: Thank you. At the

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1 moment, there really is no site within Canada 2 that is already established to accept this kind 3 of waste. A site would have to be found, an environmental assessment process would have to be 4 5 gone through, and the site would have to be 6 constructed, and so on. 7 One can expect that would take at 8 least as long as the current project and would 9 presumably cost something comparable. 10 The actual cost to any individual 11 licensee such as Cameco would probably depend on 12 what other material might be included in that site, the size of the site, and so on. It is 13 14 very difficult to estimate what it might be 15 without hypothesizing. 16 The most expensive would probably 17 be to assume that a "purpose built" site had to 18 be found by the licensee for this site only. 19 That would be more expensive than making use of 20 another site that is already planned. 21 MEMBER GIROUX: Thank you. That is very clear. And thank you for reminding me of 22 23 the \$60 million figure. 24 The question I would like to 25 address now is emergency measures. Since we have **StenoTran** 

1 somebody from Emergency Measures Ontario here, I 2 think it would be interesting to have some 3 comments on the interface that you have between 4 EMO and the Town of Port Hope and Cameco in terms 5 of dealing with an emergency, both in terms of 6 paper and in terms of actual logistics. 7 MR. McKERRELL: Neil McKerrell, 8 Emergency Measures Ontario. 9 Perhaps before responding to the 10 question, I could take a few moments to give you 11 a little bit of an update. A number of things 12 have changed since I was last before the 13 Commission. 14 At that point in time there was 15 some question raised about the status of 16 Ontario's nuclear emergency plan and the approval 17 thereof. Since the last time we were here, the 18 Cabinet of Ontario has reviewed the plan and has 19 approved it as an interim plan. We will be 20 returning to Cabinet by the end of 2002 to seek 21 their approval to remove the interim nature of 22 the plan and have it completed. That will be 23 contingent on a couple of details worked out. So that has been done. 24 25 Also, there was a question raised

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1 about the resources of Emergency Measures 2 Ontario. They are being increased somewhat, 3 considerably. Also, there is a bill before the 4 Ontario legislature at the moment that will 5 introduce a new act that will replace the 6 Emergency Plans Act with a new Emergency 7 Management Act, which, if approved, will raise 8 the bar, if you like, on the requirements for 9 emergency management programming and planning. 10 Sir, would you mind repeating 11 your question for me, please. 12 MEMBER GIROUX: Thank you for the 13 update. I think it was subconsciously part of my 14 question. 15 MR. McKERRELL: I thought it 16 might have been. 17 MEMBER GIROUX: The specific 18 question I put was to describe the interface 19 between the Ontario plan, the Town of Port Hope 20 and Cameco, both in terms of paper, in terms of 21 the plans themselves, and the logistics and 22 interfaces. 23 MR. McKERRELL: Sure. The 24 Province of Ontario Nuclear Emergency Plan is a 25 very large plan, complex and detailed, as you

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1 might appreciate. It is broken into a number of 2 different parts. 3 Part 8 of the plan deals with the 4 non-power generating, non-Chalk River type 5 facilities, which would include Cameco and the 6 other facilities of that nature. So the plan 7 does cover these. 8 The relationship between these 9 types of organizations and Emergency Measures has 10 been considerably less than it is with the large 11 power generators, and also with Chalk River. 12 However, the involvement with 13 these operators is primarily through our field 14representatives dealing with the municipalities 15 and the municipalities, in turn, dealing with 16 these operators. 17 Currently, there is no 18 requirement in Ontario that municipalities have 19 an emergency plan. That will change if the new 20 legislation is passed. All municipalities will 21 have to have not just an emergency plan but an 22 emergency management program. It will be more 23 robust than just having a plan. 24 The change in legislation will 25 require that these emergency management programs

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1 be based upon identified risks in the communities 2 in the municipalities. So it will be necessary 3 for all municipalities to conduct risk 4 assessments, to identify their risks and then to 5 assess the risks and develop emergency management 6 programs that address the specific risks. 7 At the moment, Emergency Measures 8 Ontario -- in fact, most provinces in the 9 country, if not all of them -- have been dealing 10 with what we call an all hazards approach. In 11 other words, you develop an emergency plan that 12 will cover the waterfront. 13 We are moving away from that to 14 requiring the plans be developed based on more 15 specific hazards and risks in individual 16 communities. We think that is more 17 comprehensive, and we think it is in the better 18 public interest. 19 At the moment with Cameco, in 20 particular, they work with the municipality. The 21 municipality has worked with EMO to have our 22 endorsement, if you will, of their emergency 23 plan. 24 The Municipality of Port Hope has 25 done a good job in terms of its role, its active

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1 participation in a program that we call 2 Partnerships Towards Safer Communities. That is 3 a program that is endorsed by the Canadian 4 Association of Fire Chiefs. The Fire Marshall of 5 Ontario and EMO promotes it actively in the 6 province of Ontario. 7 It is a program whereby 8 municipalities and their local industries work 9 together to identify risks, to look at what can 10 be done to mitigate those risks, and to develop 11 sound emergency response plans and programs 12 should something go amiss. 13 The Town of Port Hope, in 14 particular, is one the early communities. 15 Currently, there are about 50 communities across 16 the province that are engaged in the program, 17 working toward achievement of the levels. 18 It is a three-level program, by 19 the way. 20 Port Hope was one of six 21 municipalities that in 2001 received a 22 certificate of recognition of having achieved the 23 bottom level, the essential level. 24 The fact is that Port Hope has a 25 number of significant industries in the

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1 community, not just Cameco. They have a number 2 of risks based on those industries. It is also a 3 town that is located right beside a major 4 arterial highway. It is also right on the 5 Montreal-Toronto rail line. 6 So there is a lot of traffic, 7 both on the road and a lot of traffic on the 8 rail, that would contain hazardous materials. 9 They have recognized the industrial community 10 around them, plus they have also recognized the 11 transportation issues. The municipality has 12 worked with industry quite effectively to develop 13 some plans to address the situation. 14 They do have a CAER group, which 15 is similar in objectives to the partnerships 16 They work quite effectively together. program. 17 They have an emergency co-ordinator in the 18 municipality who is very tenacious and very 19 enthusiastic. 20 In fact, last summer with the 21 Association of Municipalities of Ontario we 22 encouraged them to invite that lady to make a 23 presentation to them as an example of a community 24 which has recognized the risks and the 25 appropriateness of developing sound emergency

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1 management programs and plans. 2 THE CHAIRPERSON: Thank you. 3 Dr. Barnes. 4 MEMBER BARNES: A follow-up 5 question to Mr. McKerrell. I think I asked this 6 of the applicant last time. 7 It relates to the system they 8 have implemented in Port Hope of the telephone emergency alert system, which seems to be a very 9 10 positive entrepreneurial approach. 11 I think the question was could we 12 see it being applied to other situations, such as 13 those municipalities that host nuclear power 14plants? If it is not inappropriate, Madam Chair, 15 could I ask whether under your new funding and 16 plans do you see this being a potential in those 17 communities? 18 THE CHAIRPERSON: I will let the 19 question go as long as it is clear that it is not 20 with regard to the licence application before us. 21 So as long as that is clear. 22 MR. MCKERRELL: The answer, 23 simply, is yes. The CanAlert system is in use 24 It is currently in use in other there. 25 communities, as well, nuclear communities. It is

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1 in use in the Chalk River area. It is in use in 2 Pickering-Darlington. It is in use there. 3 THE CHAIRPERSON: Ms MacLachlan. 4 MS MacLACHLAN: I have a specific 5 question for the representative from NRCan. Ιt 6 is about this agreement on the low level waste 7 management facility. 8 I wonder if you could tell me who 9 the parties are to the agreement and who the 10 proponent would be for the construction and 11 management of this low level waste management 12 facility. 13 Also, could you flesh out for us 14the nature of the agreement that would give 15 comfort to the proponent here today. 16 MR. McCAULEY: Thank you. Once 17 again, my name is Dave McCauley, with Natural 18 Resources Canada. 19 The parties to the agreement are 20 the federal government, the Minister of Natural 21 Resources Canada; the Municipality of Clarington; 22 the Town of Port Hope; and the Township of Hope. 23 The Township of Hope and the Town 24 of Port Hope were amalgamated as of January 1, 25 2001. So we are dealing now with the

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1 Municipality of Port Hope.

2 In terms of the proponent, the 3 proponent would be the low level radioactive 4 waste management office. The low level 5 radioactive waste management office is a division 6 of AECL that receives its funding and policy 7 direction from my department, Natural Resources 8 Canada. 9 There is a legal agreement that 10 commits us to this development with the 11 municipalities. It is recognized that in the 12 facility a volume of 150,000 cubic metres of 13 material is designated as being derived from 14Cameco's operations; its decommissioning and its 15 existing waste.

Does that answer your question or was there something else?

18 MS MacLACHLAN: Could you just 19 review that again for me in terms of the 20 acknowledgement that Cameco's waste. Is there a 21 commitment? Is that a guarantee to accept that 22 particular waste from the Port Hope facility? 23 MR. McCAULEY: That's right. Ιt 24 is explicit in the agreement that the waste 25 facility that will be built will accommodate

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1 150,000 cubic metres of material from Cameco's 2 Port Hope facility. 3 We are entering into a further 4 agreement with Cameco actually in terms of land 5 ownership on other facilities. Once again, that 6 would be restated in that agreement as well. 7 MS MacLACHLAN: Thank you. 8 THE CHAIRPERSON: I will 9 entertain some short questions. 10 Dr. Barnes. 11 MEMBER BARNES: Two very short 12 ones. 13 The location of this again is how 14 far from the plant? 15 MR. McCAULEY: The location would 16 be at the Highland Drive landfill, which is just 17 two kilometres north of the existing plant. 18 MEMBER BARNES: This is available 19 to also receive any hot material elsewhere in the 20 town. Is that right? 21 MR. McCAULEY: The facility would 22 accommodate the Cameco decommissioning wastes. 23 It would accommodate certain industrial wastes 24 within the town. It would also accommodate low 25 level radioactive waste or historic waste, as we

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1 term it, throughout the town located at various 2 licensed and unlicensed sites within the town. 3 I have to emphasize that this 4 proposal was a community driven proposal. It is 5 the Town of Port Hope that came to the federal 6 government seeking discussions that would result 7 in a local management facility for these local 8 wastes. 9 It was the municipality 10 themselves that identified which wastes they 11 would like to have accommodated within the 12 facility. 13 THE CHAIRPERSON: Thank you very 14 much. 15 Ms MacLachlan, a very short 16 question, please. 17 Have funds been MS MacLACHLAN: 18 allocated to the low level waste management 19 office of AECL to actually construct this 20 facility? 21 Well, funds have MR. McCAULEY: 22 been allocated by the Treasury Board, by the 23 Department of Finance, to Natural Resources 24 Canada to proceed with this project. So my 25 department is responsible for the funding.

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1 We, on an annual basis, provide a 2 budget to the low level office to carry out its 3 activities. So yes, on an annual basis we 4 provide the funds through to the low level 5 office. 6 MS MacLACHLAN: Thank you. 7 THE CHAIRPERSON: Mr. Graham for 8 the last question, please. 9 MEMBER GRAHAM: Thank you very 10 much. 11 A question for CNSC staff under 12 licensing conditions. I think I brought it up at 13 Day 1, but I am not sure. 14 I didn't see anywhere in the 15 licensing conditions a listing for security, 16 where it is generally always NS1 in licensing 17 conditions. 18 Could you comment. 19 That condition has MS MALONEY: 20 been added to the licence. 21 THE CHAIRPERSON: Thank you. 22 Does the licensee wish to 23 comment? 24 If I might, Madam MR. STEANE: 25 Chair, I would just add one comment.

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1 Dr. Giroux was asking questions 2 about the decommissioning of CNSC staff and the 3 dollar value. We provided a number of some 4 \$60-odd million. I just want to comment that I 5 think that number is no longer of any validity. 6 One of the criticisms that was 7 levelled at that plan was that it was not based 8 upon a real plan. The existing plan is based 9 upon something that is real and doable. If there 10 was some need to look at something else, then I 11 think that would be to recost it. 12 I think the \$60 million had 13 assumptions that were not based upon some 14reality. There is always a possibility of 15 another at the site, encapsulating the material 16 at the site, and the cost of building a similar 17 facility to that which has been proposed by the 18 Municipality of Port Hope and is on the board 19 would cost somewhat less than that \$60 million. 20 It would be more than the \$33 million but a lot 21 less than the \$60-odd million. 22 I just wanted to add the comment 23 that that \$60 million is no longer of any 24 meaning. 25 THE CHAIRPERSON: Are there any **StenoTran** 

1 questions from the Commission Members with regard 2 to that comment by the applicant on that matter? 3 Thank you very much. 4 We are going to take a short 5 five-minute break and return to the hearing. 6 Maybe I should be a bit more generous since we 7 have been sitting here for quite some time. We 8 will take ten minutes. 9 It is 10:33. At 10:43 I would 10 like you back in your seats, please. Thank you. 11 --- Upon recessing at 10:43 a.m. 12 --- Upon resuming at 10:55 a.m. 13 THE CHAIRPERSON: We will now 14 move to the interventions. 15 I would like to remind 16 intervenors appearing before the Commission today 17 that we have allocated ten minutes for their oral 18 presentation. 19 We would like to begin with the 20 oral presentation by the United Steelworkers of 21 America. 22 23 01-H32.2 24 Oral presentation by United Steelworkers of 25 America Local 13173

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1 THE CHAIRPERSON: I believe that 2 Mr. Leavit, the union president from Local 13173 3 is with us today. 4 This is outlined in CMD document 5 01-Н32.2. 6 I turn it over to Mr. Leavit. 7 MR. LEAVIT: Thank you, Madam 8 Chair and Commission body. 9 Chris Leavit, U.S.W.A. President 10 Local 13173, Port Hope, Ontario. 11 Members of the Commission, I 12 would like to express my sincere gratitude today 13 that 1 have the opportunity on behalf of the 14United Steelworkers of America, Local 13173, to 15 come before the Commission to express our 16 positive approach to alleviate concerns from both 17 the Commission and the public. 18 The following areas that I 19 believe would alleviate both the public and the 20 Commission's concerns are our high emphasis on 21 health/safety and environmental concerns. 22 We have at the Port Hope facility 23 a very well established joint Health and Safety 24 Committee that have the following commitments and 25 goals.

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1 (1) to meet as a joint committee 2 for two days each month and address concerns that 3 either party may bring; 4 (2) to assist the employer in 5 investigating, and assessing the exposure of 6 employees to hazardous substances; 7 (3) to participate in the 8 implementation of changes that may affect 9 occupational health and safety, including work 10 processes and procedures; 11 (4) to have full access to all 12 government and employer reports, studies and 13 tests relating to the health and safety of the 14 employees in the workplace; 15 (5) to make monthly workplace 16 inspections, so that every part of the workplace 17 is inspected at least once a year. 18 In addition to the duties that 19 the committee performs, they also receive at 20 their monthly meetings detailed reports from the 21 facility's environmental scientist, the radiation 22 safety officer, and the company's occupational 23 health nurse. 24 At this scheduled monthly 25 meeting, they would give specific reports or

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1 findings pertaining to the nature of their work. 2 I would like to assure the 3 Commission Members that we have a very functional 4 Health and Safety Committee that has a very high 5 degree of values towards its employees, as well 6 as the general public that we consider to be our 7 neighbours. 8 There is a commitment from Cameco 9 to assessing and managing health and safety 10 issues, as well as environmental concerns, and 11 also to making continued improvements in these 12 areas. 13 The members that I'm representing 14 today feel quite confident in making an assurance 15 to the Commission that those accomplished 16 relations will continue to grow. 17 There is a commitment from the 18 U.S.W.A. to working with both Cameco and the 19 assigned project officer of the CNSC towards 20 mutual interest of both environmental and health 21 and safety concerns. 22 Madam Chair and Members of the 23 Commission, I wish to conclude that Cameco's 24 performance has been consistently excellent in 25 terms of emissions well below regulatory levels.

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1 We have a joint committee to the maintenance of a 2 safe and healthy workplace and surrounding 3 environment. 4 I have been employed as a 5 bargaining member for 23 years, during which time 6 I have worked in almost all major aspects of the 7 Port Hope facility, ranging from operations to 8 maintenance positions. 9 At this time, as President of the 10 USWA Local 13173 at Cameco's Port Hope facility, 11 I am joining the company in requesting that the 12 Commission grant an operating licence for a 13 period of five years. 14 We fully recognize the 15 Commission's right to direct the company to make 16 any changes deemed necessary, at a time within 17 the licensing period. 18 Thank you once again for 19 permitting me to address the Commission today on 20 the licence renewal application. 21 THE CHAIRPERSON: Thank you very 22 much. 23 Are there any questions from the 24 Commission Members with regards to this 25 intervention?

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1 Dr. Giroux. 2 Thank you. MEMBER GIROUX: 3 What I would like to know, sir, 4 is: Do employees raise concerns about radiation 5 safety to you or to others in the union; and if 6 so, at what frequency? 7 MR. LEAVIT: Those members do 8 make reference to me or to those health and 9 safety members that are posted in all workplace 10 areas at Cameco. They are well posted and are 11 aware of who the health and safety 12 representatives are on the committee. 13 Depending on the severity of the 14question that the person is asking, if it is 15 something of great importance that we consider, 16 we would take it immediately and I would either 17 talk to one of the pertaining people that it is 18 their area of expertise where I could get that 19 information. 20 But those people do get a direct 21 answer back, either through that; or if the 22 content of the question can wait, it would be 23 referenced to the monthly meeting that we have. 24 We meet twice a month. 25 MEMBER GIROUX: So there are

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1 concerns raised on a regular basis. 2 MR. LEAVIT: That's correct, they 3 are raised. Then people always have questions or 4 concerns. I feel Cameco does get that question 5 back to me in a very responsive way, in a timely 6 manner. 7 THE CHAIRPERSON: Dr. Barnes. 8 MEMBER BARNES: I wanted to ask 9 whether the CNSC project officer attends any or 10 all of those meetings. 11 MR. LEAVIT: We have talked to 12 Henry recently, the project officer. We want to 13 have better communication with him. We have 14talked to him. 15 Up to this point, no, he has not 16 sat on a Health and Safety Committee that I have 17 attended. But we want to start to progress to a 18 more communicative way with him. 19 Does the CNSC THE CHAIRPERSON: 20 have any comments with regard to that? 21 MS MALONEY: I think that 22 approach is certainly consistent with our view of 23 a better way to work with the licensee and the 24 workers, and we will be exploring every 25 opportunity to work with them on that.

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1 THE CHAIRPERSON: Do you receive 2 now minutes of these meetings? 3 MS MALONEY: I will ask Mr. White 4 to respond to that. 5 MR. WHITE: Thank you, Madam 6 Chair. Michael White. 7 Yes, we do, Madam Chair. 8 THE CHAIRPERSON: Are there other 9 questions? 10 Ms MacLachlan. 11 MS MacLACHLAN: Does the union 12 keep statistics on health of its members? 13 MR. LEAVIT: You are saying an 14 actual running case study, like a year-by-year 15 case study on its workers? 16 MS MacLACHLAN: Yes. 17 MR. LEAVIT: Not actually. But 18 there is one currently that is in the works. 19 Could I ask for help on this from 20 Bob? 21 MS MacLACHLAN: Yes. 22 MR. STEANE: The study you are 23 thinking of, Chris, is an update of the Eldorado 24 Workers study on morbidity. 25 The question that you have asked

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1 vis-à-vis statistics of the health of employees, 2 to the extent we are knowledgeable of medical, 3 the nurse and through our company doctor that we 4 have they do keep records of the health of 5 individuals. 6 We provide medical exams to 7 employees on a scheduled basis, and we do have 8 those records. The employees have their own 9 doctors and their own lives, and there may be 10 things that we are not aware of. 11 MS MacLACHLAN: Then a question 12 to both the union and the company. Are there any 13 trends that are surfacing as a result of these 14 studies with respect to the health of the 15 workers? 16 MR. LEAVIT: At this time I don't 17 personally see any trend of concern to the union. 18 We do, as a union, carry health and safety as a 19 high priority, sitting at almost the top of our 20 list for our workers. 21 We do want our workers to enjoy 22 their retirement and to go home with both arms 23 and both legs at the end of the day, to enjoy 24 life. 25 MS MacLACHLAN: Before the

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1 company answers this question, I am concerned not 2 so much with accidents to limbs but longer term 3 incidents of cancer or other longer term 4 diseases. 5 MR. LEAVIT: Bob talked 6 previously about a study that is in the works 7 right now. It is not quite completed. That is 8 in the works. 9 But the steelworkers themselves 10 have not done an actual running study on that. 11 It was years ago. This is an 12 estimated year, I think 1977 or 1978. And it was 13 with Elliot Lake, I believe, in the Miners 14Guidebook. It was in some magazine that I bumped 15 across. 16 There is no actual study that has 17 been done recently by the steelworkers. 18 MS MacLACHLAN: Before the 19 company answers the original question, what is 20 the nature of the concerns that are raised by the 21 workers at these regular health and safety 22 meetings with the union? 23 MR. LEAVIT: Most of the concerns 24 would be not of a major issue but more of a minor 25 issue. It could concern anywhere of things that

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1 need to be repaired, guards, not major issues. Ι 2 don't see one sitting there right now as a major 3 issue of health and safety directly related to 4 the employees, the longevity of his or her 5 individual life. It is more of a question that 6 concerns coming to get the item fixed or repaired 7 so that it doesn't cause a future accident or 8 immediate accident. 9 MS MacLACHLAN: Thank you. 10 THE CHAIRPERSON: Thank you very 11 much. 12 We will now move to the --13 MS MacLACHLAN: Excuse me, Madam 14 Chair. I wanted the company to also respond. 15 THE CHAIRPERSON: Yes, thank you. 16 MR. STEANE: On the subject of 17 former health studies, we have not conducted -- I 18 don't think we would have the data to do rigorous 19 evaluation of the health of the employees. We 20 do, as I said, through our nurse and doctor keep 21 information. But to the extent that we have sat 22 down and reviewed all of the statistics, we have 23 not done that. 24 MS MacLACHLAN: Thank you. 25 The second part of that question

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1 Are there any concerns that have come to you is: 2 by the employees that would indicate that there 3 should be studies done? You just told us that 4 you have a study on morbidity. What about rates 5 of cancer, for example? 6 There have not been MR. STEANE: 7 issues raised or concerns raised by employees 8 about incidents of cancer or medical concerns. 9 The things that are raised by employees are 10 workplace related items, health and safety, 11 improvement of facilities, and information 12 vis-à-vis chemicals in the workplace. 13 I have not heard anyone raising 14 anything, whether it is long term health from 15 their employment through either exposure to 16 uranium or radioactive materials or any other 17 materials. 18 MS MacLACHLAN: One more 19 follow-up on that. 20 What about former employees, 21 people who have retired from the company or from 22 the operation? Do you hear concerns back from 23 those people? 24 Not to my knowledge. MR. STEANE: 25 MS MacLACHLAN: I will just ask StenoTran

1 that of the union, as well. 2 MR. LEAVIT: It is the same 3 answer back as Bob, just restating that there has 4 not been. We do see long-standing members that 5 are retirees locally around town, which is good 6 Thank you. news. 7 THE CHAIRPERSON: I just want to 8 check. Are there any further questions? 9 Thank you very much. 10 11 01-H32.3 12 Oral presentation by Canadian Nuclear Workers 13 Council 14 THE CHAIRPERSON: We would now 15 like to move to the oral presentation by the 16 Canadian Nuclear Workers Council, contained in 17 CMD document 01-H32.3. 18 I believe Mr. Falconer and 19 Mr. Clark are with us today. 20 MR. FALCONER: Thank you, Madam 21 Chair and Members of the Commission. 22 My name is Peter Falconer. I am 23 an Executive Board Member of the Canadian Nuclear 24 Workers Council. 25 With me today is Keith Clark, who

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is also an Executive Board Member of the Canadian
 Nuclear Workers Council. Keith works at the
 Cameco facility.

4 Our presentation today to the
5 Canadian Nuclear Safety Commission in the matter
6 of relicensing of the Cameco Corporation Port
7 Hope Facility.

8 Members of the Commission, the 9 Canadian Nuclear Workers Council is pleased to 10 have this opportunity to come before you. We 11 appear on behalf of the nuclear industry workers 12 in Canada and specifically in support of one of 13 our member organizations, Local 13173 of the 14 United Steelworkers of America, which represents 15 workers at the Port Hope facility of Cameco 16 Corporation.

As do all other member organizations of the CNWC, Local 13173 holds health and safety of workers to be paramount. Cameco management and the union have established a good understanding and an excellent working relationship.

The union fully endorses and supports the very active health and safety culture promoted and established by Cameco. It

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1 works closely with Cameco management to establish 2 safety policies and procedures to maintain a safe 3 and healthy workplace and to protect the 4 surrounding natural environment. 5 The plant Health and Safety 6 Committee consists of both union and management 7 representatives. The Committee has full access 8 to all reports, studies, and tests relating to 9 health and safety of employees. It receives 10 detailed reports from various company officers 11 responsible for the environmental, health, and 12 safety aspects of operations. It meets monthly 13 to address any and all health and safety issues 14 and conducts regular workplace inspections. 15 Its activities provide the 16 workforce with a high level of confidence that 17 the workplace is safe and the environment in 18 which their families, friends, and neighbours 19 reside is protected. 20 Union and management 21 representatives from the Health and Safety 22 Committee work closely and co-operatively with 23 the assigned CNSC project officer during their 24 inspections of the workplace. The Health and 25 Safety Committee has the authority to initiate

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1 action and require a response within specific 2 time limits on any matter judged by Commission 3 inspectors to require attention and improvement. 4 Cameco's operations continue to 5 receive positive community and industry response. 6 The many union members who live in Port Hope 7 receive very positive feedback on Cameco's 8 efforts within the community. The company maintains communications with the community 9 10 through participation in various community 11 initiatives and joint committees. 12 These joint committees ensure 13 that any municipal concerns regarding plant 14 operations are expressed to management and dealt 15 with promptly and effectively. The plant's 16 cleanliness and its health and safety record have 17 impressed delegates from other CNWC member 18 organizations who have toured the plant. 19 Cameco continues to display a 20 progressive and caring approach towards the 21 health and safety of its workers and protection 22 of the environment. Plant performance continues 23 to be consistently excellent with emission levels 24 well below regulatory levels. 25 The CNWC therefore joins with

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1 Local 13173 in fully supporting the extension of 2 the company's operating license for five years. 3 With the indulgence of the 4 Commission, unless otherwise requested I would 5 suggest that the rest of the presentation is 6 simply a background in the CNWC. I believe the 7 Commission has heard some of this information 8 before, so I would defer to call this the end of 9 the presentation at this point. 10 THE CHAIRPERSON: Thank you very 11 Commission Members do have the documents much. 12 in advance, and we do have an opportunity to read 13 all of the documents. 14 So thank you very much for your 15 presentation. 16 With that, I would like to open 17 the floor to Commission Members. 18 Ms MacLachlan. 19 I would like to MS MacLACHLAN: 20 ask you the same question about health related 21 issues. 22 The Canadian Nuclear Workers 23 Council is in a position to oversee a broad 24 spectrum of nuclear workers. With respect to the 25 Port Hope facility of Cameco, have any concerns

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1 come to the workers' council related to cancer, 2 kidney damage or mortality resulting from their 3 employment at the particular Port Hope facility? 4 MR. FALCONER: To my knowledge, 5 But I will defer to Keith since he works no. 6 there, just to make sure that there haven't been 7 any kind of problems related to that. 8 MR. CLARK: The answer to that is 9 no. 10 MS MacLACHLAN: Could you say 11 that once more into the mic? I notice that 12 wasn't on. 13 MR. CLARK: The answer to that is 14 no, there aren't any major concerns. Nobody has 15 brought anything back to us. 16 MS MacLACHLAN: Thank you very 17 much. 18 THE CHAIRPERSON: Dr. Giroux. 19 MEMBER GIROUX: I was interested 20 in your statement about the very positive 21 feedback that your members are receiving from the 22 community. We are used to hearing some fairly 23 negative feedback here. 24 Could you give me some concrete 25 examples of what you are referring to?

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1 MR. CLARK: We have gone to the 2 high school and have done several lectures on 3 what we are all about, and the students have 4 really come back positive compared to several 5 years ago when they didn't know nothing about the 6 place. Now we are trying to educate everybody 7 and tell them what we are all about, and they 8 seem to respond positively. That's both students 9 and mothers and fathers and other people in the 10 community. 11 THE CHAIRPERSON: Thank you very 12 much. 13 14 01-H32.8 15 Oral presentation by Port Hope and District 16 Chamber of Commerce 17 I would like to THE CHAIRPERSON: 18 move forward on the agenda and move to the oral 19 presentation by Port Hope and District Chamber of 20 Commerce, as noted in CMD document 01-H32.8. 21 I believe the President of the 22 Chamber of Commerce is with us today. 23 Thank you very much for coming, 24 The floor is now yours. Madam. 25 MS SAN MARTIN: Good morning,

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1 Madam Chair and Members of the Commission, ladies 2 and gentlemen. My name is Sherry San Martin. Ι 3 am President of the Port Hope and District 4 Chamber of Commerce. 5 On behalf of the Chamber's 320 6 members, who employ over 4,000 individuals, I 7 thank you for this opportunity to reinforce the 8 Chamber's support of Cameco Corporation and the 9 Port Hope Conversion Facility licence renewal 10 application. 11 Our support is based on our 12 confidence that through Cameco Corporation's and 13 your Board's monitoring process, the firm 14currently complies and will continue to comply 15 with the CNSC regulations and renewal criteria. 16 Our support of the renewal falls 17 in line with our mandate to promote and improve 18 trade and commerce and economic, civic and social 19 welfare of our district. The firm contributes 20 significantly to each of these areas. 21 Economically, Cameco contributes 22 270 jobs to the Town of Port Hope, continuing to 23 represent approximately \$9.2 million in spending 24 power, stimulating the local trade and commerce 25 as reported by the Port Hope Economic

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1 Development.

2 As an active member of the 3 Chamber and business community, Cameco 4 Corporation supports local trade and commerce. 5 This is achieved by local purchasing of lumber, 6 hardware, printing, the employment of 7 restaurants, taxi companies, purchasing of 8 employee incentive gifts, and numerous other 9 local businesses and services. 10 Cameco Corporation is a vital 11 component of the Port Hope community. 12 They consistently demonstrate an 13 excellence in corporate responsibility and 14 community through their generous donations to 15 social, cultural and civic activities. Cameco 16 earns the support of communities with which it 17 interacts. 18 In Port Hope they have been 19 nominated numerous times for excellence in large 20 business and community service in the annual Port 21 Hope Business Excellence Awards Program. It is 22 evident through their actions that Cameco cares 23 for, and supports, the communities in which they 24 operate. 25 They support their employees

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1 taking part in community activities by the 2 donations made to over 40 non-profit 3 organizations. The significant contributions the 4 firm has made to the local community this past 5 year include the Capitol Theatre, \$75,000; Port 6 Hope Library, \$50,000; Friends of Music, \$2,500; 7 Northumberland United Way, \$23,000 and change; 8 and the New Hospital, \$250,000. 9 Cameco continues to make numerous 10 and diverse contributions to our local community. 11 Just a few of the organizations that benefited 12 this past year from Cameco's generosity include: Ganaraska Sharks Hockey Tournament; Float Your Fanny Down the Ganny; Beaver Athletic Association

13 14 15 -- I should have put that one at the end; I'm 16 sorry. 17 Cameco Peewee Rebels; Norac Sea 18 Devils; Kids Help Phone; St. Anthony's Breakfast 19 Club; Northumberland Art Gallery; Port Hope 20 Soccer Club; Cobourg Minor Baseball and Soccer; 21 St. Mary's Robotics; Port Hope Robotics; Junior

Achievement; Friends of Music; Northumberland lacrosse; Cobourg Film Festival; Children's Wish Foundation; Northumberland U13 Soccer Team and the U17 Soccer Team; Driftwood Theatre Show

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1 Sponsor; Community Training and Development, 2 which is a camp for kids; Agricultural Society; 3 Tim Horton's Camp Day; Port Hope High School Year 4 Book; and a number of others. 5 Cameco supports their 6 professional staff to become members of pertinent 7 professional societies and institutes and their 8 participation in the activities of these 9 organizations. These activities include 10 responsibilities in numerous committees, 11 organizations of technical conferences and 12 seminars, and executive responsibilities in the 13 administration and management of these 14 organizations. 15 Cameco supports the professional 16 staff to visit local schools, participate in 17 events and give presentations on various 18 subjects. Examples are: Trinity College School 19 Science Fair; Kawartha Pine Ridge District School 20 Board Elementary Millennium Science Symposium; 21 Terry Fox Public School Grade 6; Lord Elgin 22 Public School Grades 4 and 5; Howard Jordan 23 Public School Grade 5, Experiments for Chemistry 24 Teacher Symposium. 25 This year Cameco Technology

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1 Development, CTD, initiated contacts with the 2 universities of Ontario. Joint activities 3 include providing seminars and lectures given by 4 the employees to the fourth year students and 5 graduate students and initiating research 6 projects. Examples are the Royal Military 7 College, Queens University and Toronto 8 University. 9 Cameco Corporation continues to 10 take a leadership role in development 11 partnerships and strategic alliances to bring 12 many community projects to fruition, including 13 the Community Awareness Emergency Response Group, 14 CAER, and the establishment of the Community 15 Alert Network, CAN, to enhance emergency response 16 capabilities. 17 The firm offers automated 18 external defibrillation training to its emergency 19 medical and response personnel. 20 Cameco works closely with local 21 fire and police departments and provides training 22 jointly with their emergency response teams. 23 Cameco has also recently held an 24 open house to proudly showcase their operations 25 to local population and families of their

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1 employees.

2 In closing, Cameco Corporation is 3 a member in good standing and strong supporter of 4 the Port Hope and District Chamber of Commerce 5 and our mandate. As a member they continue to be 6 a consistent contributor to the economic, civil 7 and social wellbeing of our district and our 8 community. Therefore, we are in support of their 9 licence renewal for a five-year period. 10 On behalf of the Port Hope and 11 District Chamber of Commerce, I thank you for 12 allowing us to present an overview of the 13 positive impact Cameco Corporation has on our 14community and for your attention. Thank you. 15 THE CHAIRPERSON: Thank you. 16 The floor is now open for 17 questions. 18 Dr. Giroux. 19 MEMBER GIROUX: As you can deduce 20 from some of the questions I have been asking in 21 the past few minutes, we are quite interested in 22 the health concerns of citizens in Port Hope. 23 You are very supportive of Cameco 24 and the operations. That is very clear. 25 But the question is: Do you in **StenoTran** 

1 your function within the Chamber of Commerce ever 2 hear any concerns raised about the effects of 3 Cameco's operations on the health of citizens? 4 MS SAN MARTIN: I am fortunate to 5 have been in the Port Hope community for 6 approximately four years now. I am also a 7 manager of a local financial institution in town. 8 Therefore, I do have a lot of opportunity to 9 speak with a number of consumers and business 10 people in the town. 11 I haven't heard one thing to do 12 with long-term illnesses or the death rate in the 13 area. 14 THE CHAIRPERSON: Thank you very 15 much for your presentation. 16 We will move now to CMD 01-H32.4. 17 Originally, this was slated as an 18 oral presentation by the Port Hope Community 19 Health Concerns Committee. Ms Faye More was 20 scheduled to be with us today and she, 21 unfortunately, phoned this morning. And because 22 we are very interested in presentations with 23 regards to hearings, we have endeavoured to reach 24 her by phone to patch her in by teleconference, 25 but we have been unable to do that.

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1 She had also been asked to 2 present the next CMD, which is H32.5, the oral 3 presentation by Port Hope Nuclear Environmental 4 Watchdogs. 5 With our inability to patch her 6 in by teleconference, we are moving then to have 7 32.4 and 32.5 become written submissions to the 8 Commission this morning and, as such, we will be 9 treating them as written submissions. 10 I will note that we did have 11 these submissions in advance, and the Commission 12 Members have had time to read these and to digest 13 the contents thereof. 14 15 01-H32.4 16 Written presentation by Port Hope Community 17 Health Concerns Committee 18 THE CHAIRPERSON: With that, I 19 will move to H32.4, now a written submission by 20 the Port Hope Community Health Concerns 21 Committee. 22 I open the floor for questions 23 from Commission Members. Thank you. 24 Dr. Barnes. 25 MEMBER BARNES: This particular StenoTran

1 intervenor raises issues that are really quite 2 broad in contrast to the licensing issue that is 3 before us today. Nevertheless, these are issues 4 that have been brought before the Commission in 5 its former guise as the Atomic Energy Control 6 Board and refer to actions that were taken by 7 that Board in terms of some of the broader health 8 studies. 9 I think I have to direct some of 10 my questions to staff. 11 The question I have is: The 12 three reports that are appended to Ms More's 13 report by Drs. Mintz, Bertell and Leece, have 14 these been referred back to the Commission 15 before? 16 I was on the Commission when the 17 initial study was conceived and put in practice, 18 and so on. But I don't recall seeing these 19 reviews. 20 Were they brought before the 21 Commission? 22 I will ask Dr. Mary MS MALONEY: 23 Measures to respond, please. 24 DR. MEASURES: I am going to have 25 to refer that one to Dr. Chatterjee, because I **StenoTran** 

don't know the details. I apologize.

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2 DR. CHATTERJEE: For the record, 3 by name is Robi Chatterjee. I am the Head of 4 Radio Biology, Epidemiology and Dosimetry 5 Section.

Dr. Barnes, the review was done by Dr. Eric Mintz for the Cancer Incident Study and Dr. Darlington. These peer reviews were then sent to our colleagues in Health Canada who did the study for us, and they have responded to the questions directly to the reviewers.

Dr. Mintz's review is repeated here by the PHCHC, and we will be willing to answer questions on that, if you would like to ask us.

16 MEMBER BARNES: I find all the 17 reviews extremely critical of the study, 18 surprisingly critical. Basic things like the 19 study not really having a defined authorship, for 20 example; even questioning -- it is hard to go 21 into all the details, but I think it is pretty 22 evident from the continuing thread throughout 23 these documents that these are extremely cortical 24 reviews of the study.

25 Maybe I could just put in a

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1 general sense. We could be here all day 2 answering point by point. 3 How does staff feel about the 4 nature of these reviews on that study? 5 MS MALONEY: I will ask Dr. Mary 6 Measures to respond to that. 7 DR. MEASURES: Thank you. We as 8 a government agency make sure that we use the 9 proper procedures and scientific rigidity when we 10 do a study. In this case, the studies were 11 contracted out to Health Canada, who has a 12 mandate to do this type of study. 13 I think the criticism of them is 14 quite unjustified. Unfortunately, we were not in 15 the position to do what the Port Hope Committee 16 wished, and that was to give them a grant of a 17 couple of hundred thousand dollars so they could 18 do their own study. 19 I think that is part of the issue 20 here: that the results that came out of the 21 Health Canada study are not what were anticipated 22 by the Port Hope Committee. So they are very 23 critical of anything that didn't come up with the 24 right conclusions. 25 I think it is very unfortunate

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1 that Mrs. More is not here today to address this. I think it needs to be in the record of who said, 2 3 or we did or they did, or what. I think there is 4 a gross misunderstanding here. 5 I believe that the CNSC, or then 6 the AECB, did everything possible to have good 7 studies done and to have them properly peer 8 reviewed before they were published. 9 MEMBER BARNES: If I could follow 10 up, there is an underlying theme throughout these 11 studies that challenged the very structure of the 12 study; that it was inappropriate in many ways to 13 resolve this particular issue. 14 That leads me to wonder, in a 15 sense -- I have to be careful in my phrasing here 16 -- whether enough time or competence was put, not only by Health Canada, but by the former AECB in 17 18 defining the study in the first place. 19 What I don't have is any evidence 20 of the competence of these reviewers. I know one 21 can get down to looking at competence of 22 competence of people. These individual reviewers 23 are, in a sense, questioning the competence of 24 the Health Canada reviewers, who remain

25 anonymous.

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1 We have before us some documents 2 that don't in fact give us any information on the 3 qualifications of these reviewers. So I am a 4 little in the dark here. 5 We are dealing not so much with 6 Ms More's comments, but Ms More is reminding us 7 that these documents do exist. They are the 8 documents of specialists, supposedly, in the 9 field, and these specialists are raising very 10 serious questions about the structure of the 11 study itself. 12 DR. MEASURES: For the record, it 13 is Mary Measures again. 14 I will just make an opening 15 comment and then pass it to Ms Rachel Lane, who 16 is our epidemiologist and will know the details. 17 The study proposed by the Port 18 Hope Committee was to go around with a survey and 19 ask questions of individuals. They were to ask 20 them: Were you sicker this year than you were 21 the year before? That was the study that was 22 proposed. 23 We had that reviewed and, based 24 on the review, we went into further studies that 25 were a bit more robust.

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1 For details on that, I will pass 2 it to Ms Lane, who is the epidemiologist. 3 MS LANE: For the record, I am 4 Rachel Lane. I am the epidemiologist for the 5 I work with the Radiation and CNSC. 6 Environmental Protection Division. First of all, I think you asked a 7 8 question regarding the competency of the 9 investigators that conducted the Cancer Incident 10 Study. 11 These people have over 20 years 12 individually, and perhaps 50 years combined, 13 experience doing disease surveillance. Health 14 Canada is the national organization responsible 15 for disease surveillance in Canada. I have no 16 doubt about their credentials. 17 With respect to the reviews, we 18 had two reviewers, as mentioned, Dr. Mintz and 19 Dr. Darlington. These peer reviews were provided 20 back to the investigators, and they were given 21 opportunity to comment on the reviews. 22 We were very satisfied with the 23 comments back. 24 With respect to the other two 25 reviewers that were chosen by Faye More's **StenoTran** 

1 committee, I have seen the reviews and I have 2 criticisms of the reviews. 3 For example, Mr. Leece is a 4 toxicologist, and his comments deal as a 5 toxicologist would to an epidemiological study. 6 He comments about looking at renal failure; that 7 conducting such a study in Port Hope would not 8 have a large enough population, therefore not 9 enough power, to conduct such a study. 10 Second, Dr. Bertell makes lots of 11 criticisms in the study. One concern she had, 12 for example, which we can criticize would be her 13 discussion of not considering such -- she has 14 problems with considering confounding variables, 15 such as tobacco smoking and sort of downplays the 16 role of tobacco smoking. 17 Eighty per cent of lung cancer in 18 Ontario is caused by tobacco smoking. 19 In essence, I think that those 20 reviewers' reviews equally need to be reviewed 21 and taken into consideration in light of the 22 overall quality of the Cancer Incident Study. 23 MEMBER BARNES: Do you know the 24 specialization of Dr. Bertell? What is her 25 specialty?

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1 MS LANE: I believe she is a 2 statistician. 3 THE CHAIRPERSON: Dr. Giroux? 4 MEMBER GIROUX: Maybe one final 5 question on this whole question of the health 6 studies. This is one that seems important to me. 7 You have read the peer reviews. 8 A question to staff is: Is there anything in 9 there that might have changed your recommendation 10 concerning the licence here? 11 MS MALONEY: I will refer that to 12 Dr. Measures in the first instance. 13 DR. MEASURES: Thank you. For 14 the record, I am Mary Measures of REPD. 15 No, there is nothing there that 16 would influence the recommendation for the 17 licence. 18 THE CHAIRPERSON: I have a 19 question with regard to the non-health study 20 component of CMD 32-4, and that is with regard to 21 "Section II, Cameco Corporation Application for 22 Re-licensing". 23 There are comments there with 24 regard to Waterway Keeper Organization and some areas that are under study or currently under 25

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1 study by this organization and other areas of 2 concern to this interest group. 3 Are there any areas, from both 4 the point of the proponent or with regard to the 5 CNSC staff, that they wish to clarify further to 6 this submission on those specific matters? 7 I am referring to pages 6, 7 and 8 8 of this CMD document. 9 Would the proponent like to 10 start? 11 Madam Chair, Bob MR. STEANE: 12 Steane from Cameco. 13 There are a number of points in 14 that Section II. I think many of them are not 15 related to this licence application. 16 I am not aware of any of the work 17 of the Waterway Keepers in Port Hope. I am aware 18 of some information that the Lake Ontario Keepers 19 did relative to Port Granby Waste Site, but that 20 is not a topic here. That they have something in 21 Port Hope, I have no knowledge of what that is 22 that they may be studying. 23 When I review that, I see nothing 24 In the recommendations they talk about in there.

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a conflict of interest with the CNSC, and I leave

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1 that to the CNSC to decide on. This is in the 2 recommendations. 3 The issue of uranium emissions, I 4 think we have discussed that. We think there is 5 nothing in those recommendations that would 6 preclude issuing of a five-year licence. I think 7 the issue of uranium emissions are being dealt 8 with, are dealt with, are controlled, and don't 9 present any hazard to the public or the 10 environment. 11 I think those are all the 12 comments I have on that submission. 13 THE CHAIRPERSON: Staff? 14 MS MALONEY: Thank you. It is 15 Cait Maloney. 16 I would like Dr. Thompson to make 17 some comments on some of the environmental 18 aspects of the concerns raised. 19 DR. THOMPSON: There were several 20 comments in the CMD related to either the Ontario 21 Lake Keepers or some of the issues about zero 22 discharge and zero accumulation in soils. 23 The Lake Ontario Keepers did 24 report issues of toxicity for at least one of the 25 waste sites. Environment Canada, following this

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1 information, did an inspection; took samples and 2 did toxicity tests, as well as a contaminant scan 3 on the effluent samples that were taken. 4 The information that we have from 5 Environment Canada is that none of the samples 6 were toxic and none of the samples revealed 7 contaminants that would be unexpected for this 8 type of site. 9 So for us, this is not an issue 10 of concern. 11 Similarly for Port Hope, as far 12 as I know the Ontario Lake Keepers have not 13 issued information related to potential toxicity 14of effluent or other areas. 15 There is some reference to the 16 MOE air standards sort of giving a permit to 17 pollute. Essentially, the air standard is not a 18 permit to pollute in the sense that you can 19 release amounts of radionuclides or uranium that 20 would accumulate in soils to a given level. 21 It is essentially a back calculation, and a level of conservatism depth 22 23 should prevent unreasonable risks from happening. 24 In addition to the air standards, there are 25 controls in place on the facility to ensure that

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1 the emissions are kept as low as possible. 2 With the information on current 3 emission rates and the controls in place on the 4 facilities, we have not seen, and we don't 5 anticipate accumulation in soils to be 6 significant, even over a very long operational 7 period. 8 I don't believe that the issues 9 that have been raised are a concern in terms of 10 licence renewal for this facility., 11 THE CHAIRPERSON: There is a 12 comment with regard to the International Joint 13 Commission on the Great Lakes having concerns 14 with regard to "severe radioactive - heavy metal 15 collusion in the harbour". 16 Are you aware of any concerns of 17 the International Joint Commission on the Great 18 Lakes? 19 This refers to DR. THOMPSON: 20 work that was done in the 1980s by this 21 organization, as well as Environment Canada. At 22 the time, Environment Canada had a contaminated 23 sites program. Because of industrial activities 24 and a lot of the organic contaminant presence in the Great Lakes and effects on fish-eating birds, 25

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1 there was a lot of effort focused on the Great 2 Lakes to identify areas of concern that appeared 3 to be contaminated. 4 The harbour is one of those areas 5 of concern, because of the industrial practices 6 that were taking place in the 1930s, 1940s, 7 1950s, and so on. 8 There are unknown levels of 9 contamination in the harbour. There are levels 10 of organic contaminants, as well as lead and 11 radionuclides, and some of the other metals. 12 That information was used in the 13 assessment conducted by Environment Canada of 14releases of radionuclides, and the Port Hope 15 facility was included in that assessment. 16 The conclusion of that assessment 17 is that Cameco is not contributing significantly 18 to add to the contaminants in place, and the 19 contaminants are bound to sediments and are not 20 being released back to the water column. In 21 effect, they are not a threat to human health or 22 to the environment, more than what is in place 23 now because of those historic practices. 24 THE CHAIRPERSON: Are there any 25 further questions?

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1 Mr. Graham. 2 MEMBER GRAHAM: Earlier this 3 morning we talked about the figure of 150,000 4 metres, and I believe Cameco indicated that about 5 108,000 metres was the figure to clean up the 6 site. 7 Dr. Thompson was just talking 8 about the harbour. Would the 108,000 metres that 9 you talked about include harbour clean-up also? 10 Or would the 150,000 be sufficient to clean up 11 both harbour and the site? 12 MR. STEANE: Bob Steane from 13 Cameco. 14 The clean-up of the harbour is 15 not part of the 150,000. But the clean-up and 16 volumes for the harbour are specifically 17 identified in the plan that the Port Hope 18 Municipality put forward and the agreement with 19 the government. It is over and above that, and 20 provision is there for the harbour. 21 THE CHAIRPERSON: Thank you very 22 much, Commission Members. 23 01-H32.5 24 25 Written presentation by Port Hope Nuclear StenoTran

1 Environmental Watchdogs 2 THE CHAIRPERSON: We will now 3 move to the written submission by the Port Hope 4 Nuclear Environmental Watchdogs, as noted in CMD 5 document 01-H32.5. 6 As I noted earlier, this 7 originally was to be an oral presentation by 8 Mr. Chris Conti, who called earlier this week and 9 said he was unable to do that. Ms More is not 10 here to substitute for him. So it will be a 11 written submission. 12 Are there any questions or 13 comments by Commission Members with regard to 14 32.5? 15 Mr. Graham. 16 MEMBER GRAHAM: In the issues 17 outlined, I believe a lot of them have been 18 covered already this morning by other questions. 19 But in one of the issues with regard to insurance 20 -- and this goes to Cameco. 21 Maybe I may not be in order, 22 Madam Chair; and if I am not, just say so. 23 My question would be: Do you 24 carry a liability insurance policy; and if so, is 25 it relevant to tell us how much that is, as it

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1 relates to Item 5 in the submission? 2 MR. CHAD: Gary Chad from Cameco 3 in answer. 4 Cameco has, in our opinion, more 5 than adequate liability insurance in place for 6 third party damage for loss. Our insurers do not 7 wish us to release the amount of insurance 8 coverage in a public forum in terms of the 9 principal. That could prejudice the insurer in 10 the event of a lawsuit against the insured. 11 We certainly are prepared to give 12 that information to the Commission, if requested. 13 I would suggest that we could provide it on a 14confidential basis, if that would meet your 15 needs. 16 MEMBER GRAHAM: That is why I 17 prefaced my remarks around that, because I 18 realize that it may prejudice anything that may 19 happen. 20 My question then would be to CNSC 21 staff: Does CNSC staff review the liability 22 insurance coverage by Cameco on this facility; 23 and if so, is it reviewed on an annual basis to 24 see that the policies are up to date, and so on? 25 MS MALONEY: That is not an area

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1 that we consider at all. So there is no review 2 of the policy. 3 MEMBER GRAHAM: Thank you. 4 Another question I have relates to no. 7 in their 5 issues. 6 Again for clarification and 7 timing, and so on, they are referring to the fact 8 that: 9 "...NEW believes that the 10 proposed Highland Drive site 11 in particular is unacceptable 12 because of its location." 13 Are all these interventions that 14 may be coming forward taken into consideration in 15 the time frame that we were given this morning of 16 2008 for a facility being able to receive 17 material? 18 I am not sure who to ask that to, 19 but perhaps CNSC staff first. 20 MS MALONEY: The establishment or 21 the proposal to establish the site will be 22 reviewed through the CEAA process. There will be 23 an appropriate public comment at that time. 24 MEMBER GRAHAM: My only question, 25 then, is: You don't see any delay because of the

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1 comment made in 7. You are still confident of 2 the 2008 time frame for receiving material. 3 MS MALONEY: I do not think it is appropriate to comment on the timeliness of that, 4 5 because there is a process to follow. 6 THE CHAIRPERSON: Ms MacLachlan. 7 MS MacLACHLAN: In NEW's 8 submission they suggest that the reports from 9 Cameco are not made available to the public; that 10 they are made available to the municipality's 11 committee entitled Protection to Persons and 12 Property Committee. 13 Is this indeed the case? What 14are the issues surrounding disclosure of the 15 information or the actual reports to the general 16 public? 17 MR. STEANE: Reporting to the 18 public is at a public meeting. It is a committee 19 of council to which all the public are invited. 20 The presentations are to them, and questions are 21 entertained from the council and from the public. 22 The reports are submitted to 23 CNSC, and I think they say that in here. This 24 committee does receive copies of that report. 25 They are welcome to attend. There are advertised

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1 public meetings to discuss the reports. All the 2 information is open to the public. 3 MS MacLACHLAN: Thank you. 4 MS MALONEY: Might I add 5 something? 6 MS MacLACHLAN: Yes. 7 MS MALONEY: CNSC staff do 8 actually send copies of that quarterly report to 9 Mr. Conti. 10 THE CHAIRPERSON: Thank you very 11 There are no further questions with regard much. 12 to that document. 13 14 01-H32.6 15 Written submission from The Corporation of the 16 Town of Deep River 17 THE CHAIRPERSON: I will now move 18 to CMD document 01-H32.6, which is a written 19 submission from the Corporation of the Town of 20 Deep River. 21 Are there any questions from 22 Commission Members with regard to this 23 submission? 24 There are no questions with 25 regard to this submission.

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1 2 01-H32.7 3 Written submission from The Corporation of the 4 Municipality of Port Hope 5 THE CHAIRPERSON: We will move to 6 the written submission from The Corporation of 7 the Municipality of Port Hope, as outlined in CMD 8 document 01-H32.7. 9 Are there any questions from 10 Commission Members with regard to this written 11 submission? 12 There are no questions. 13 14 01-H32.9 15 Written submission from Sierra Club of Canada 16 Nuclear Campaign 17 THE CHAIRPERSON: We will now 18 move to the written submission from the Sierra 19 Club of Canada Nuclear Campaign, as outlined in 20 CMD document 01-H32.9. 21 Are there any comments or 22 questions with regard to the submission from the 23 Sierra Club of Canada? 24 Mr. Graham. 25 MEMBER GRAHAM: I have just one StenoTran

1 question to CNSC staff. I believe it should be 2 to them. It is regarding fire hazard. 3 There is a statement in there 4 that I think should be clarified: 5 "CAMECO is not in full 6 compliance with the national 7 Fire and Building Codes. The 8 CNSC staff report does not 9 elaborate on what proportion 10 of the upgrades are 11 outstanding." 12 I wonder if we could get a list 13 of that. Are they in compliance now? This was 14 written back on December 14th. 15 MS MALONEY: I will refer that 16 question to Bob Lojk, our fire protection 17 specialist. 18 MR. LOJK: Bob Lojk, Safety 19 Evaluation Division, Engineering. 20 There are two issues here. The 21 building codes and fire codes are not retroactive 22 documents. We audited Cameco, and our inspector 23 reviewed the facility and made a series of 24 recommendations. 25 We looked at the recommendations

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1 for their safety impact, and we requested that 2 Cameco undertake a certain number of 3 recommendations. 4 Most of the recommendations 5 raised by our consultant were reviewed, found 6 doable, and Cameco has undertaken a program to 7 put those in place. 8 The urgent ones, the ones that we 9 felt required the highest priority, were done; 10 things such as systemic upgrades, program 11 upgrades, and small repairs. In some cases there 12 were large repairs, removing buildings and 13 evacuating the contents in order to reduce the 14 hazard; organizing certain items of high hazard. 15 There are other upgrades, large

16 capital works, that are in process: doors, walls, 17 suppression system upgrades, and the like. Those 18 require several years to plan, design and 19 implement.

20 We have looked at the plans put 21 in place by Cameco, and we find the plan for 22 implementation agreeable and acceptable, given 23 the kind of risk and the scope of the work. 24 Briefly, Cameco may not be in 25 full compliance with the current building codes.

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1 They are in compliance with the fire code, the 2 operational aspects of the fire code. 3 They are probably in compliance 4 with the building code as was in place at the 5 time that the buildings were originally built 6 starting back in the 1940s, if I am not mistaken. 7 In 2004, I believe, which is the 8 final date in place, the balance of the work will 9 be done. 10 During that time other things may 11 come up, and Commission staff will be inspecting 12 the facilities to ensure that in fact they are in 13 compliance. 14 Furthermore, commencing with this 15 licence that is being proposed now, Cameco will 16 have a clear requirement to comply with both the 17 building code and with the fire code: the 18 building code as of any projects that are being 19 built, proposed or modified; the fire code from 20 the moment the licence goes into operation. 21 We will be reviewing with them 22 and other licensees the applicability of NFP801, 23 which is an American standard which deals 24 specifically with facilities such as Cameco. Ιt 25 may not be fully applicable. We are just trying

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1 to find out what portions would be best applied 2 and would provide the highest level of safety, 3 reasonable safety. 4 In the opinion of CNSC staff, 5 Cameco has upgraded where possible, and their 6 program is in place as reasonable. We don't 7 believe that program can be expedited to achieve 8 a closer time frame. 9 THE CHAIRPERSON: Would the 10 applicant wish to comment? 11 I think Mr. No. MR. STEANE: 12 Lojk has summarized the situation. We do have a 13 schedule. We are submitting frequent reports, 14 quarterly reports to CNSC, on our progress to 15 that schedule. We are so far on schedule and 16 meeting all of our commitments. 17 MEMBER GRAHAM: My other 18 question, then, is to CNSC staff. Are there any 19 of these issues, either under the fire code or 20 the building code, critical enough to be made a 21 licence condition? Or are the all more or less 22 being controlled through regular reports, whether 23 it is monthly or quarterly? 24 MS MALONEY: I will ask Bob Lojk 25 to respond to that.

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1 MR. LOJK: We have a schedule 2 that details when the work will be done. We are 3 accepting that as a regulatory commitment. We 4 will be tracking each of the points, and if the 5 schedule slips we will be creating presumably an 6 action item to ensure that the work gets done. 7 At this time, given that there is 8 a requirement for them to meet the fire code and 9 there is a requirement for them to meet the 10 building code, we are tracking it very closely. 11 Nothing has slipped or appears to 12 be such that it would require additional 13 compliance measures. 14 THE CHAIRPERSON: Ms MacLachlan. 15 MS MacLACHLAN: What is the time 16 frame for the implementation of the final 17 elements of the schedule? 18 We expect all work to MR. LOJK: 19 be completed by 2004, if I am not mistaken. Most 20 of the work, 99.9 per cent of the work, will be 21 completed by the end of 2002. 22 MS MacLACHLAN: Thank you. Ι 23 have a supplementary question arising from the 24 CMD. 25 The statements that are made

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1 about the codes, the National Fire Protection 2 Association codes not directly addressing nuclear 3 hazards, and that there is a consultation process 4 in place to review the requirements of the codes 5 with a view to applying it to Cameco's 6 facilities. 7 What is the time schedule set for 8 conclusion of that review process? 9 MS MALONEY: Again, I will refer 10 that to Bob Lojk for the detail. 11 MR. LOJK: There is a meeting on 12 February 5th, in a couple of weeks, with all licensees, not only Cameco but the other 13 14 licensees in the same business line. At that 15 point staff will decide whether in fact it is 16 warranted to implement the conditions of 801 or 17 not. 18 These facilities are large 19 industrial facilities, and unlike reactor 20 facilities we are not talking about high level 21 radiation. We are trying to control the spread 22 of radiation from a fire event by controlling 23 common hazards. 24 So there will not be much 25 difference in these facilities, except for very StenoTran

1 select and defined instances for anything beyond 2 the building code and the fire code. 3 However, the NFP standard exists. 4 Our consultant has recommended the applicability 5 of the NFP801 to such facilities be looked at, 6 and we are doing that. 7 We would expect, depending what 8 the resolution is at the end of February, that we 9 will be in a position some time in early summer 10 to either decide to implement the entire standard 11 or applicable portions of the standard, or in 12 fact not implement the standard at all, believing 13 that the radiation protection measures that we 14have as part of other regulations, and the 15 building code and fire code requirements, do 16 cover all areas of concern. 17 THE CHAIRPERSON: For the record, 18 could you note which would be the other licensees 19 that would be influenced by this review of the 20 fire code? 21 MR. LOJK: The meeting that will 22 be held on February 5th will be held with Cameco 23 Blind River, Cameco Port Hope, General Electric 24 and Zircatec. 25 We have a meeting tomorrow to

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1 deal with the Waste Facilities Division of 2 Ontario Power Generation. 3 We are further dealing with other 4 aspects, such as AECL, and the like, on a 5 sequential basis to see what the applicability 6 would be for them. 7 Since the meeting with OPG is 8 tomorrow, they have prepared a presentation and 9 have hired a consultant to do the comparison. We 10 will be using that information and building on it 11 to have a composite position on this subject by 12 some time in the summer. 13 THE CHAIRPERSON: Are there 14 further questions? 15 Thank you very much. 16 This completes the MR. LEBLANC: 17 record for the public hearing --18 THE CHAIRPERSON: Sorry. Do you 19 have a question, Dr. Giroux? 20 MEMBER GIROUX: Yes. I'm sorry, 21 I failed to respond because I thought you were 22 still dealing with the item from the Sierra Club. 23 I have a more general question, and I think I would like to address the 24 25 recommendation of the five-year licence at this

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1 This will be more general. It covers the time. 2 three recommendations that we have on the table 3 today about the three licences. 4 We understand from staff there is 5 a recommendation to present a mid-term report, 6 and you have supplied us in the CMD with the 7 table of contents of what the report will cover. 8 I have no question with that. 9 I am trying to understand what 10 will be the framework in which this would be 11 done. 12 Questions are, for instance: 13 Would the applicant be expected to attend or to 14make a presentation or send a written submission 15 reacting to your report? 16 The other question is: Would 17 intervenors be not only notified but also invited 18 to come? 19 Dr. Giroux, this is MS MALONEY: 20 a process that has not quite been finalized yet. 21 Obviously any submissions to the Commission are 22 going to be public, and comments can be 23 entertained. 24 The mechanics of whether or not 25 we will have intervenors, I am not aware of that

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1 at this stage.

2 MEMBER GIROUX: You say you are 3 in the process of thinking about the mechanics. 4 MS MALONEY: Yes. 5 MEMBER GIROUX: The question 6 which is related to that is: If we go far in 7 terms of suggesting, for instance, that the 8 applicant does make a presentation and that 9 intervenors are welcome to have presentations 10 too, is there still gain in going from a two-year 11 process to a five-year process? Would that be 12 making the process as heavy as it is now? 13 MS MALONEY: For further detail, 14 I will refer this to Barclay Howden to give more 15 detail on some of the savings that we anticipate 16 can be made. 17 MR. HOWDEN: Barclay Howden 18 speaking. 19 In terms of the savings, we have 20 done an estimate. Right now, we feel that by 21 going to a five-year licence we would save about 22 50 per cent of our current resources being spent 23 on licensing that could be then made available to 24 compliance, plus the mid-year report. 25 As a ballpark figure, that would

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1 free up each year 100 to 125 person-days per 2 year. 3 Now, in terms of producing the 4 mid-term report, that would probably, averaged 5 over five years, consumes between 25 to 50 person 6 days. 7 So in essence, our estimate is 8 that we would probably free up about 75 person 9 days per year to be available to comply in other 10 activities, for this particular service line. 11 MEMBER GIROUX: Is that per 12 licensee? 13 No, it's for the MR. HOWDEN: 14 whole service line of the six licensees within 15 this service line. 16 MEMBER GIROUX: And then, to 17 complete my understanding, would the efficiency 18 rates of having applicants present and making 19 comments and intervenors present, does that add to staff's load? 20 21 MR. HOWDEN: Barclay Howden 22 again. 23 Having the applicant present 24 probably would not, but certainly the intervenors 25 would add some because we would have to be

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1 prepared to respond to their comments. But I 2 don't know how much more effort that would be. 3 THE CHAIRPERSON: Dr. Barnes. 4 MEMBER BARNES: Would you see 5 this as a one or two-day affair? 6 MR. HOWDEN: Barclay Howden 7 speaking. 8 I would see it as a one-day 9 affair, in terms of just one day during the mid-10 point of the licence as opposed to a two-day 11 meeting. Was that the question? 12 MEMBER BARNES: I think from the 13 viewpoint of the intervenors, as we see with the 14 pattern of material, we get a lot of material 15 from intervenors once they have had a chance to 16 see and see the effects on Day 1. If you have 17 the mid-term meeting, if it's a one day, I would 18 suspect it might be somewhat of a disadvantage to 19 intervenors. We don't have intervenors here 20 today, at least the principal ones here, so they 21 couldn't necessarily comment. 22 But I think it's worth staff 23 giving some thought as to that. 24 MR. HOWDEN: Barclay Howden 25 again. We are starting to consider that in terms

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1 of we will probably want to consider releasing 2 our information and applicants well in advance so 3 that the intervenors would have an opportunity to 4 comment in time to meet whatever deadlines that 5 the Commission requires. 6 MR. LEBLANC: Since there are no 7 more comments, this completes the record for the 8 public hearing in a matter of an application by 9 Cameco Corporation for a licence to operate the 10 Port Hope Nuclear Fuel Facility. 11 The Commission will deliberate 12 and will publish its decision in due course. Ιt 13 will be posted on the CNSC website as well as 14 distributed to participants. 15 Merci. 16 THE CHAIRPERSON: My intention is 17 just to have a very short five-minute break, a 18 stretch break, and to move directly onto the next 19 licence hearing. 20 So if we could just have a very 21 short break and then move onto the next one, 22 please. 23 --- Upon recessing at 12:05 p.m.

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