

1 **HEARING DAY TWO**

2 **Ontario Power Generation Inc.: Application for the**
3 **renewal of the operating licence for the Western**
4 **Waste Management Facility (formerly known as**
5 **Radioactive Waste Operations Site 2)**

6 We will begin with item 3 of the
7 agenda which is Hearing Day Two on the matter of
8 the application by Ontario Power Generation Inc.
9 for the renewal of the operating licence for the
10 Western Waste Management Facility, formerly known
11 as Radioactive Waste Operations Site 2.

12 The first day of the public
13 hearing on this application was held February
14 28th, 2002.

15 The public was invited to
16 participate either by oral presentation or written
17 submission on Hearing Day Two. March 19th was the
18 deadline set for filing by intervenors. The
19 Commission received ten requests to intervene.

20 The notice of Public Hearing
21 2002-H2 was published on December 3rd, 2001.
22 Commission Members present for Day One of the
23 hearing included Dr. Barnes, Dr. Giroux,
24 Mr. Graham, Ms MacLachlan and myself. As
25 Ms MacLachlan is absent today she will not

1 participate in this decision.

2 Presentations were made on Day One
3 by the applicant, Ontario Power Generation Inc.
4 under CMDs 02-H8.1 and 02-H8.1A and by the
5 Commission staff under CMD 02-H8.

6 I note that the applicant will
7 present supplementary information today, therefore
8 I would like to call on the oral presentation by
9 Ontario Power Generation Inc. as outlined in CMD
10 document 02-H8.1B.

11 Mr. Nash.

12

13 **02-H8.1B**

14 **Oral presentation by Ontario Power Generation Inc.**

15 MR. NASH: Good morning, Madam
16 Chair, Members of the Commission.

17 Thank you for this opportunity to
18 make a presentation.

19 I'm Ken Nash, VP, Nuclear Waste
20 Management and I have this morning with me several
21 of my colleagues to assist in answering any of
22 your questions.

23 The purpose of this presentation
24 is two-fold. Firstly it provides answers to
25 specific questions raised by Commissioners at the

1 Day One Hearing, and secondly it broadly addresses
2 some of the issues raised by intervenors.

3 The questions raised by
4 Commissioners related to the location of the
5 Western Waste Management Facility on the Bruce
6 site, the mitigation measures for tritium in
7 groundwater and the planned improvements at the
8 facility over the next five years.

9 Information is also provided in
10 this presentation to address issues of the
11 operation of the draft fuel storage facility, the
12 long-term management of radioactive materials
13 stored at the facility and OPG's accountability
14 both to the CNSC and to the community.

15 This is an aerial view of the
16 Bruce Nuclear Power Development. Bruce A is
17 located at the top left corner of the picture, and
18 Bruce B at the bottom left. The Western Waste
19 Management Facility is located at the centre right
20 and is approximately 1.3 kilometres from the
21 nearest point on the lakeshore.

22 The tritium levels in the most
23 sensitive water sample at the waste facility has
24 been steady for about five years at approximately
25 6,000 Bq/L per litre. There was a recent step

1 increase as a result of excavations to install
2 improved drainage. The level rose to 14,000 Bq/L
3 in February and has now fallen off to 12,000 Bq/L.
4 Investigations concluded that the level should
5 stabilize between the current level and the 6,000,
6 and that should occur somewhere in the order of a
7 year or so.

8 These levels are well below the
9 generic screening criteria of three million Bq/L.
10 The Commission asked at the Day One Hearing for us
11 to provide information on mitigation measures of
12 tritium in groundwater.

13 OPG has invested in mitigation
14 measures over the past four years to control the
15 level of tritium in the groundwater and these
16 include replacement of varied surface water
17 drainage, redirection of roof drainage, repair of
18 the catch basin in the area of low-level storage
19 buildings, resealing of the asphalt and recaulking
20 of construction joints and modified ventilation of
21 the low-level storage buildings.

22 The actions we have taken since
23 last fall are to increase monitoring to a monthly
24 basis and an independent review of the causes of
25 the step increase. We are now reviewing whether

1 to commence dehumidification of low-level storage
2 buildings to reduce the amount of tritium released
3 to the environment.

4 This next overhead provides an
5 overview of the five-year plan and waste
6 quantities to be received or expected to reduce
7 from 7,000 m³ to 5,000 m³ per year over the
8 five-year period.

9 The volume of low-level waste to
10 be incinerated will return to historic levels of
11 3,000 m³ per year. The volume this year is down
12 because of the outage to replace the incinerator.

13 The number of dry storage
14 containers to be loaded with used fuel and placed
15 in storage will increase to 84 per year, assuming
16 two units of Bruce A return to service. This
17 compares to Pickering where we need to load 70 dry
18 storage containers per year to keep pace with the
19 output of eight reactors at Pickering.

20 Staff levels will increase from
21 130 to 150 by the end of this year as we start dry
22 storage and will then increase to 160 by 2006.

23 Emissions will remain less than 1
24 per cent of the derived release limit. ISO 14001
25 re-certification will occur each year and it's

1 planned to improve our safety and environmental
2 management system rating from a level 7 to a
3 level 8.

4 In fact, the continuous
5 improvement in this area is an important part of
6 our plan. The International Safety and
7 Environmental Rating System provides a method of
8 setting targets, measuring improvements in 20
9 elements including training, communications, plant
10 inspections, houses analysis, emergency response.
11 Independent auditors ask a predefined set of
12 questions of all levels of staff and examine
13 documentation and use a predefined scoring system.

14 For instance, staff will be
15 questioned on the frequency and content of group
16 communications and their view on workplace safety.

17 Our target was to achieve a level
18 8 in 2003, but we were advised last month by the
19 independent auditor that we had indeed already
20 achieved a level 8. We were also advised
21 previously that a level 7 was an upper quartile
22 performance in comparison to other companies.
23 Going forward we plan to maintain or better this
24 level of performance.

25 The engineering and construction

1 projects planned over the next five years are
2 listed here. By the end of this year, we will
3 have completed construction of low and
4 intermediate-level waste storage and used fuel dry
5 storage and we will have replaced the incinerator,
6 all of this in accordance with CNSC construction
7 approvals previously obtained.

8 We may build a new radioactive
9 material transportation maintenance facility by
10 the end of 2004.

11 The environmental assessment
12 approval for the used fuel dry storage facility
13 was received in April 1999 from the Ministry of
14 the Environment after a comprehensive assessment.
15 CNSC construction approval was received in January
16 2000, after CNSC hearings on this subject.

17 OPG applied for an operating
18 approval in November last year. This approval has
19 been requested for June this year to allow
20 commissioning of the facility by September.

21 This facility is a repeat of the
22 Pickering dry storage facility. This includes
23 using identical containers, welding equipment,
24 test equipment, transportation systems and
25 monitoring systems. The Pickering Facility has a

1 very well proven performance. Emissions and dose
2 to the public are very small, in the same way as
3 the Western Waste Management facility. The
4 Pickering dry storage facility has not had a lost
5 time accident for the past six years.

6 Turning now to the long term, OPG
7 expects a number of decisions to be made in the
8 next five years on the long-term management of
9 both used fuel and low-level waste. Any changes
10 in practice or new modified facilities that would
11 stem from these decisions would require CNSC
12 approval before any implementation.

13 The draft Nuclear Fuel Waste Act
14 currently before Parliament requires three nuclear
15 energy corporations to form a waste management
16 organization initially to review alternatives for
17 the long-term management of used fuel.
18 Socioeconomic impacts, costs, risks, benefits and
19 compensation will be considered and extensive
20 stakeholder consultation will be carried out as
21 part of that review.

22 The WMO will then submit a report
23 to government and the federal cabinet will make a
24 policy decision on which options need to be
25 adopted in Canada. OPG is now working with

1 Hydro-Québec and New Brunswick Power and has made
2 significant progress to the formation of this
3 waste management organization.

4 The Nuclear Fuel Waste Act also
5 requires trust funds to be established. OPG has
6 already accumulated segregated trust funds in
7 excess of the \$500 million required by the Act.

8 Following a decision by the
9 federal cabinet on the long-term plan for used
10 fuel, CNSC licensing activity will be required
11 before any decision could be implemented. This
12 would apply whether the decision by the government
13 was to build a geological disposal facility or
14 whether it was to extend the life of the existing
15 storage practices.

16 OPG expects to follow a similar
17 process on low-level waste. A study has already
18 been completed on low-level waste disposal
19 technology and we expect to complete a similar
20 study on prolonged above-ground storage by June
21 this year. We now have a Memorandum of
22 Understanding with the Municipality of Kincardine
23 on how to proceed and how to integrally involve
24 the Municipality in this review.

25 So whatever the outcome of these

1 decisions on low-level waste, CNSC licensing would
2 be required before any changes in existing
3 practice.

4 Should the Commission decide to
5 grant a five-year licence, this will not dilute
6 our obligation to the community for communication,
7 nor do we see it diminishing our accountability to
8 the CNSC to comply with the conditions of our
9 licence. OPG has, and will continue to
10 demonstrate its commitment to the community and
11 its openness regarding the facility operation.

12 We routinely make presentations
13 and issue newsletters. There is an annual open
14 house where members of the community visit the
15 facility, meet with staff. We are member of the
16 Kincardine Joint Liaison Committee and the South
17 Bruce Impact Advisory Committee. We hold seminars
18 on the transportation route with officials and
19 communities along the transportation route. We
20 hold bi-annual meetings with the medical officer
21 of health. This year we will start to include a
22 report card in our newsletter.

23 OPG is held accountable by the
24 CNSC through the conditions of our licence and we
25 provide quarterly technical reports, detailed

1 emissions from the facility, and other performance
2 data are provided to CNSC staff. We fully
3 cooperate with the periodic assessments and
4 compliance tools which are carried out by CNSC
5 staff. We understand that a mid-term report on
6 the facility's performance will be made by CNSC
7 staff to the Commission and, of course, OPG will
8 appear before the Commission to answer any
9 questions which may arise from that report.

10 At Day One of these hearings we
11 provided a summary of the performance of the
12 Western Waste Management Facility over the past
13 six years. This is a demonstrated record of
14 proven public and worker safety, proven
15 environmental protection, compliance with
16 regulatory requirements, including compliance with
17 our OP & P's, and a management commitment to
18 continuous improvement.

19 It's on this basis that OPG
20 respectfully requests a licence for a period of
21 five years.

22 Thank you.

23 THE CHAIRPERSON: Thank you.

24 Before we open the floor for
25 questions, I would just like to clarify that the

1 CNSC staff does not intend to make a presentation
2 today. Is that correct, Mrs. Maloney?

3 MS MALONEY: That's correct, Madam
4 President, however Dr. Ferch and Ms Klassen and I
5 are available to answer questions.

6 THE CHAIRPERSON: Thank you.

7 On that basis, we will now open
8 the floor to questions from the Commission Members
9 to either the applicant and/or the staff.

10 Mr. Graham?

11 MEMBER GRAHAM: Thank you.

12 The first question is to OPG
13 Regarding, I think at Day One, I had asked for a
14 map and I realize you have given an overview on
15 the slide, slide 2 of the site.

16 What I was really wanting by the
17 map was to look at drainage ditches, and so on,
18 and see where they finally end up into settling
19 ponds, and so on. That was one of the questions
20 that I was wondering about. On the aerial
21 overview it really doesn't show as such, but my
22 question would be: Is there one central location
23 for all the site drainage to drain into settling
24 ponds, and so on?

25 MR. NASH: I will hand that

1 question to Hugh Morrison, Director of Nuclear
2 Waste Operations.

3 MR. MORRISON: The site itself, on
4 the site there is a surface drainage system and
5 there is a sub-surface drainage system. The
6 surface drainage system and the sub-surface
7 draining system both collect all the water, all
8 the rain that has fallen on the site and takes all
9 of the water from the site. It goes through a
10 sample station where we continually monitor the
11 level of radiation that is in the drainage system
12 and then it's released to one ditch area.

13 There is no settling pond and the
14 levels of radiation are consistently below the
15 levels that are permitted for release.

16 MEMBER GRAHAM: What you are
17 saying is that you do a sampling and if everything
18 is okay it's released into one area which
19 subsequently goes where? Into the lake?

20 MR. MORRISON: Yes, but the
21 material is consistently released from the site.
22 We don't sample before we release it from the
23 site. The levels of contamination that the water
24 picks up on the site is extremely small. We do
25 not have a significant process in place, for

1 example, that takes a lot of water to cool
2 processes, and so forth, so that we do not have a
3 process that uses a lot of water that has any risk
4 of becoming contaminated.

5 MEMBER GRAHAM: As a back up, if
6 your sampling showed contamination, and hopefully
7 it would never do that, but if it did show
8 contamination, where would it go or where would
9 you divert it to?

10 MR. MORRISON: There is a large
11 filter bed it can be diverted to.

12 MEMBER GRAHAM: My question to
13 CNSC staff is: Is this a satisfactory process,
14 and is this more or less the norm of how surface
15 water would be handled even if it may come up with
16 a higher count than it should? Is there a way of
17 handling it? I guess that's my question.

18 MS MALONEY: Cait Maloney. I will
19 ask Dr. Thompson to respond to that.

20 DR. THOMPSON: Good morning. For
21 the record my name is Patsy Thompson. I am
22 Director of the Environmental Protection and Audit
23 Division of the CNSC.

24 The drainage ditches that are in
25 place are suitable for the types of waters being

1 collected. Essentially the waters reflect
2 contamination from rainwater and snow melting and
3 being collected to those niches. Those are
4 suitable for those types of levels of
5 contamination.

6 For sites where contamination is
7 from processes or building drainage where the
8 levels of contamination can be higher, then
9 obviously a different system is in place. But for
10 the Bruce site, for the drainage from the waste
11 management area it is suitable.

12 MEMBER GRAHAM: The scenario that
13 I would like to ask a question on, if I may, Madam
14 Chair, is: If there was a fire and excessive
15 amounts of water were used on an area that had
16 caught fire, that were contaminated materials, and
17 so on, is there a way of collecting that water and
18 doing something with it, or would it just go into
19 the drainage ditches? That's really what I was
20 coming to.

21 MR. NASH: If I could point to
22 our -- we have fire detection systems in our
23 buildings and the fire suppressant is CO₂. So if
24 the fire did occur, we use CO₂. So that would
25 douse the fire and it wouldn't be necessary to use

1 any water to put the fire out.

2 MEMBER GRAHAM: So what you are
3 saying is that all of the storage facilities that
4 are there where low-level nuclear waste is stored,
5 if there was a fire, none of it would be handled
6 with water. It would all be handled by CO₂.

7 MR. NASH: That's correct.

8 MEMBER GRAHAM: Thank you.

9 To CNSC --

10 MR. MORRISON: There would just be
11 one rider to that. One rider to that is that that
12 is certainly true of all of the low-level storage
13 buildings where we store large quantities of the
14 waste.

15 We do have one area where we do
16 processings that uses a water system. In that
17 particular building the amount of waste that is
18 ever stored in the building is very low and in
19 that building there is a sump that would collect
20 the water.

21 MEMBER GRAHAM: Do CNSC staff want
22 to add anything else to that?

23 DR. FERCH: For the record, I'm
24 Richard Ferch, Director of Wastes and Geosciences
25 Division.

1 Yes, we are satisfied that the
2 water collection systems within the buildings and
3 around the outside of the buildings are adequate,
4 not only for normal operation, if you like, but
5 also for emergency conditions such as fire.

6 MEMBER GRAHAM: Thank you.

7 I just have on other question, if
8 I may, Madam Chair, and that is with regard to the
9 incineration. I think it showed that it will
10 reach 3,000 metres a year from -- I forget exactly
11 what it was, but anyway -- yes, from 300. By the
12 year '06 it will be 3,000 metres a year.

13 The disposal of the ash from the
14 incinerators, and so on, is that material -- and I
15 don't know this -- is it radioactive any of this
16 ash that comes out of the incinerators? If it is,
17 where is it -- well, regardless, where is it
18 disposed of?

19 MR. NASH: So would you like the
20 Commission or --

21 MEMBER GRAHAM: OPG.

22 MR. NASH: There is ash that is
23 the byproduct of incineration and that's collected
24 and that is mildly radioactive and that's stored
25 in low-level storage buildings.

1 MEMBER GRAHAM: So the ash is
2 stored there afterwards. Capacity for storage,
3 how much capacity do you have?

4 MR. NASH: We have just completed
5 the construction of a low-level storage building
6 which is -- that will have another 8,000 m³ of
7 storage capacity. With that storage capacity, we
8 will have sufficient capacity for all low-level
9 waste including the ash for a period of at least
10 five years.

11 MEMBER GRAHAM: So 3,000 metres of
12 incineration possibly does not give you 3,000
13 metres of ash, but your calculations are that it
14 will take you to the end of your proposed request
15 licensing period or beyond, or just the year
16 before? Can you explain that?

17 MR. NASH: I'm not sure of the
18 exact date, but I think the date is something like
19 2007-2008, and for your information the 3,000 m³
20 that goes into the incinerator, the volume of ash
21 is in the order of about 50 m³. It's 70 to 1. It
22 in that order of volume reduction.

23 THE CHAIRPERSON: Dr. Barnes?

24 MEMBER BARNES: Could you just run
25 past me the figures that Mr. Graham is referring

1 to? You have the figures there for '02 and '06.
2 The figures for the low-level waste and the dry
3 storage of 305 respectively, are those comparable
4 basically for the last five years as well?

5 MR. NASH: Yes. At the facility
6 for the low to intermediate-level waste received
7 at the facility have reached somewhere between
8 4,000 and 6,000 m³ per year over the last six
9 years. It's slightly more this year because we
10 are retrieving some historic waste from Bruce A
11 and Bruce B as part of a clean-up arrangement that
12 we have with Bruce Power.

13 So these numbers here, other than
14 the slight change this year, are consistent with
15 their history over the past five or six years.

16 MEMBER BARNES: Okay.

17 THE CHAIRPERSON: Dr. Giroux?

18 MEMBER GIROUX: I don't have any
19 questions.

20 THE CHAIRPERSON: My question is
21 just if we could just take a little further the
22 issue of the capacity of this facility and the
23 life expectancy of the facility. Could you just
24 enlarge a little bit the proposed life expectancy
25 of the facilities that are currently in place and

1 that will be built with this current plan?

2 MR. NASH: I will provide an
3 overview answer and I will ask Dr. Atika Khan, our
4 Safety Assessment Manager, to add or clarify
5 anything.

6 Generally speaking our structures
7 have a design life of 50 years and when we carry
8 out environmental assessments, before we obtain
9 construction approval -- for instance for the dry
10 storage building that is now being constructed
11 there was an environmental assessment for that,
12 and I believe that was done on the basis of a
13 50-year life and the environmental impacts or
14 design of the building, et cetera, based on a
15 50-year life.

16 Dr. Khan may want to clarify that.

17 DR. KHAN: I don't think I have
18 much to add to that. My name is Atika Khan.

19 The environmental assessment that
20 was carried out for the latest edition in
21 intermediate-level waste storage was based on a
22 50-year design life, but it was projecting 108
23 ICATs, the containers which contain
24 intermediate-level waste. So we have
25 environmental approval for 108, except that we

1 have only built 54. But we don't believe that we
2 are going to need the other 54 that we have
3 environmental assessment approval for until well
4 beyond 2007, maybe 2008, or so.

5 THE CHAIRPERSON: I suppose my
6 question was as well as environmental approval for
7 design in terms of capacity for this facility. I
8 think you have probably answered that, but I just
9 want to look at the issues of capacity as well as
10 design areas.

11 MR. NASH: Just to clarify. When
12 we finish the construction that we identified this
13 year on that overhead, the expansion of low and
14 intermediate-level waste storage, it will not be
15 necessary to add to that storage capacity until
16 2007 or 2008.

17 THE CHAIRPERSON: But you will
18 need to add to it in 2007 or 2008.

19 MR. NASH: Potentially, yes.

20 THE CHAIRPERSON: May I ask staff,
21 in terms of looking at comparable facilities in
22 Canada or around the world, is this the design
23 characteristics of a 50-year design basis? Is
24 that standard? Is that normal?

25 MS MALONEY: I will ask Dr. Ferch

1 to comment on that.

2 DR. FERCH: Yes, this is normal
3 practice for an interim storage-type facility like
4 this.

5 THE CHAIRPERSON: Further
6 questions? Mr. Graham?

7 MEMBER GRAHAM: On Day One, I was
8 asking about monitoring and Dr. Thompson had
9 indicated that there was limited monitoring done
10 of biota, but went on to say that OPG and Bruce
11 Power had jointly -- it had started under OPG, but
12 it's now jointly conducting ecological risk
13 assessments.

14 She went on to say that OPG and
15 Bruce Power will need to determine whether
16 environmental effect monitoring needs to be
17 implemented in addition to the current program.

18 Is there anything further to
19 report -- a question to OPG -- on this joint
20 project that you are doing to see if you will be
21 implementing additional practices in conjunction
22 with what you are already doing today?

23 MR. NASH: Hugh Morrison will
24 answer that question.

25 MR. MORRISON: We are expecting a

1 report in the very near future that looks at some
2 aspects of that.

3 In fact, we have a meeting set up
4 with Bruce Power to discuss if there are any
5 additional activities that are required. That
6 meeting is scheduled for next week.

7 MEMBER GRAHAM: This is to
8 Dr. Thompson.

9 Do you want to add anything to
10 that, or are you satisfied with what is being
11 conducted?

12 DR. THOMPSON: Yes. The approach
13 we have taken with OPG and Bruce for the Bruce
14 site is the same one we have taken with other
15 nuclear power stations, where we review the
16 ecological risk assessment and make sure that it
17 is technically sound and then on that basis we
18 review the recommendations.

19 It is a similar process we have
20 used for the Bruce site and we are waiting for the
21 updated version of the ecological risk assessment
22 before we can make any judgement on the proposed
23 recommendations for environmental effects
24 monitoring.

25 MEMBER GRAHAM: I won't occupy all

1 the questions, but I did have one other one that I
2 wanted to ask with regard to the slide No. 5.

3 You had:

4 "Possible Radioactive
5 Material Transportation
6 Maintenance Facility: 2004"

7 The radioactive material
8 transportation, the material that you would be
9 transporting, is it all on-site material? Why do
10 you need this facility? Why would you be building
11 this facility in 2004?

12 Could you give me a little
13 overview of what type of transportation you would
14 be doing, whether it is on-site or off-site?

15 MR. NASH: The material stored at
16 the Western Waste Management Facility, low and
17 intermediate level waste, those are byproducts
18 from not only the reactors at the Bruce but also
19 from Pickering and Darlington. That is low or
20 intermediate waste.

21 I just want to clarify that used
22 fuel from each of those three stations is stored
23 at their particular sites. So there is
24 transportation that has been under way for the
25 past 20 years of low and intermediate level waste

1 from Pickering and Darlington to the Western Waste
2 Management Facility.

3 Those transportation packages are
4 licensed by the CNSC in accordance with
5 international standards.

6 Part of our quality assurance
7 program is to carry out maintenance of those
8 packages. The maintenance is currently done and
9 has been historically done in something called the
10 Central Maintenance Facility on the Bruce site.
11 This is now part of the leased property to Bruce
12 Power and the understanding we have with Bruce
13 Power is that they will continue to allow us to
14 maintain those packages in what is essentially
15 their facility.

16 By 2004, however, it is expected
17 that we will make other arrangements for the
18 maintenance of those transportation packages and
19 one of the options is to construct a maintenance
20 facility on the Western Waste Management Facility.

21 MEMBER GRAHAM: Thank you.

22 Will that need a licensing change
23 at the time or will that just be a part of the
24 licence?

25 Staff?

1 DR. FERCH: Yes, Richard Ferch.
2 Yes, it will require an amendment
3 to the licence to authorize that activity.

4 THE CHAIRPERSON: Thank you,
5 Mr. Nash.

6 We will now move to the
7 interventions.

8 Before we start, I would just like
9 to remind intervenors that we have allocated
10 approximately 10 minutes for each of the oral
11 presentations and I would like your assistance for
12 us to maintain that schedule.

13

14 **02-H8.2**

15 **Oral presentation by the Municipality of**
16 **Kincardine**

17 THE CHAIRPERSON: I would like to
18 begin with the oral presentation by the
19 Municipality of Kincardine. This is outline in
20 CMD document 02-H8.2. I understand the Mayor of
21 Kincardine is with us today.

22 Good morning, Mr. Mayor.

23 MR. KRAEMER: Thank you very much.

24 Bonjour, messieurs et mesdames.

25 Good morning, ladies and gentlemen, Members of the

1 Commission.

2 My name is Larry Kraemer and I
3 appear before you today in the capacity as the
4 Mayor of Kincardine representing the community
5 which is host to the Western Waste Management
6 Facility.

7 I wish to begin this presentation
8 by being very clear with the message that my
9 council is satisfied that the Western Waste
10 Management Facility is being run in a safe manner.
11 I have an insight into this subject because the
12 municipality participates with Ontario Power
13 Generation in monthly nuclear liaison meetings at
14 which community concerns and safety presentations
15 are received and discussed.

16 In an effort to remain current of
17 the issues and to represent the public interest at
18 the local level, my council and I take
19 considerable time and effort to understand the
20 current status of the nuclear industry.

21 Recent developments such as the
22 new federal Bill C-27 -- which deals with the
23 management of high level fuel -- is a good example
24 of one of the new policy issues that we have spent
25 time reviewing.

1 We are pleased that this new Bill
2 recognizes the public as a stakeholder in this
3 important societal issue and fully endorses the
4 concepts contained in the Bill. It is from this
5 new level of understanding that the municipality
6 has entered into negotiations with Ontario Power
7 Generation to undertake a similar process that
8 will examine the community issues surrounding the
9 management of low and medium level nuclear waste.

10 The municipality will be taking
11 time over the -- well, it's now done. But the
12 municipality will be taking time over the next
13 month with ontario Power Generation to put a
14 memorandum of understanding together to map out
15 our issues. I would be pleased to provide the
16 CNSC with the final draft of this and would be
17 prepared to discuss it with you.

18 On the understanding that the
19 above memorandum of understanding is in place by
20 the hearing date, we will support a
21 non-transferable five-year license renewal, with a
22 review in two years to evaluate the progress of
23 the negotiations.

24 I would like to confirm for you,
25 as Ken Nash has said, that we have this memorandum

1 of understanding in place now, and I believe that
2 my staff has forwarded a copy in the last couple
3 of days to you for your review.

4 It is from this important
5 symbiotic relationship that the needs of both
6 industry and the public interest can work together
7 to forge a strong relationship that is both
8 healthy and safe for the Canadian public.

9 In closing, I remain available for
10 any questions relating to the municipal/nuclear
11 relationship and/or the proposed process for the
12 management of low and intermediate level nuclear
13 waste.

14 Thank you very much.

15 THE CHAIRPERSON: Thank you,
16 Mr. Mayor.

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

19 Dr. Giroux.

20 MEMBER GIROUX: Yes. We don't
21 have, as Members here, a copy of the memorandum.
22 Maybe this was too late for being submitted as a
23 public document.

24 But could you explain to us
25 briefly what is the content and the intent of the

1 memorandum?

2 MR. KRAEMER: Yes, I could. I
3 could read you a copy if you would prefer as well.
4 I have it here with me. It is only one --

5 MEMBER GIROUX: I would rather
6 have you summarize it.

7 MR. KRAEMER: It is only one page.

8 THE CHAIRPERSON: You can read it,
9 yes.

10 MR. KRAEMER: Would you like me
11 to?

12 THE CHAIRPERSON: Yes.

13 Is OPG comfortable with that?

14 Just to clarify before you start,
15 it is a finalized document now?

16 MR. KRAEMER: Yes, it is.

17 THE CHAIRPERSON: Yes. Thank you.

18 If Dr. Giroux agrees we will have
19 a quick reading of it.

20 Thank you.

21 MR. KRAEMER: Point No. 1 is:

22 "The purpose of this
23 Memorandum of Understanding
24 is to set out the terms under
25 which Ontario Power

1 Generation (OPG) will
2 develop, in consultation with
3 the Municipality of
4 Kincardine, a long-term plan
5 to deal with low and
6 intermediate level waste at
7 the Western Waste Management
8 Facility (WWMF).

9 2. A meeting of the
10 Municipality of Kincardine
11 and OPG representatives will
12 be held in July 2002 to
13 review the work plan which is
14 to be developed by OPG. The
15 intention would be to
16 complete the activities
17 described in the work plan at
18 the latest by July 2003.

19 3. The work plan will
20 include:

21 a) a review of the study
22 which has been contracted
23 to SGN to examine
24 technical feasibility and
25 other related

1 considerations of the
2 long term management of
3 low and intermediate
4 level waste.
5 b) a socio-economic
6 impact assessment in the
7 Municipality of
8 Kincardine of the
9 existing operation of the
10 WWMF and of the potential
11 long-term plans.
12 c) a review of European
13 and American models for
14 the long-term management
15 of low and intermediate
16 level waste. This
17 component will involve
18 on-site visits and will
19 look at issues such as
20 technical infrastructure
21 and community
22 compensation.
23 The work plan will also
24 include a review of OPG's
25 reference plan of interim

1 storage as well as permanent
2 storage at the WWMF."

3 It sets out the contacts who will
4 be communicating, which are myself, Councillor
5 Barry Schmidt, Councillor Howard Ribey and our CAO
6 John deRosenroll, as well as OPG's contacts, who
7 are Richard Dicerni, Ken Nash and Terry Squire
8 from OPG.

9 "5. OPG will provide
10 financial support to the
11 Municipality of Kincardine to
12 offset mutually agreed to
13 costs including review of
14 reports and travel.

15 6. OPG and the Municipality
16 of Kincardine will develop
17 jointly a communications plan
18 and will address the issue of
19 involvement of Saugeen Shores
20 and other stakeholders as
21 appropriate."

22 Thank you.

23 MEMBER GIROUX: Thank you. I
24 think that clarifies the issue.

25 There is no question about the way

1 you have put it in your letter and as you have
2 just read it -- not the memorandum but your
3 submission -- the resolution by council is a
4 straightforward. It is dated March 19 and it is
5 in support of the five-year licence.

6 Yet, in your letter you say that
7 it is on the understanding that the memorandum is
8 in place. Your letter seems to make it
9 conditional, while the resolution, as I read it,
10 is not conditional. Can you explain that?

11 MR. KRAEMER: Yes. Council has
12 taken a lot of time deliberating over this issue
13 and, as you can understand, council operates like
14 very many committees and sometimes consensus of
15 how things should be put together are different.

16 Council felt very strongly that at
17 this time of change in the nuclear industry, as we
18 go from publicly-owned companies to private and
19 for-profit companies, and as we look at the future
20 and the size of the site, that it was necessary
21 for us to deeply examine the issues to look at
22 long-term -- not just the safety issues but also
23 the relationship issues, the political issues and
24 answer some of the hard questions that we feel are
25 necessary.

1 Before this point in time in the
2 history of the nuclear industry we had always
3 understood that at the end of the generation cycle
4 the waste, particularly the high level waste,
5 would be removed from the site. Now, with the
6 Bill C-27 issue, one of the issues that is looked
7 at is permanent storage on the sites.

8 We feel that we need to look very
9 deeply at this issue, that it will require us to
10 go to our constituents -- or "could" I should say,
11 maybe it would be better -- to go to our
12 constituents to clarify their wishes in this
13 matter. Before this happens we would like to take
14 a very close look at what the implications of this
15 are to our municipalities and to the region and
16 develop a plan with OPG with how that would be
17 dealt with.

18 We see that this could take a
19 large amount of time for us as a municipality and
20 as a region to look at these things because, as
21 you are well aware, these are very complex issues.

22 So I guess that council felt very
23 strongly that we needed to have a very well
24 thought out and agreed to path forward to how to
25 address this. We have many questions that we feel

1 need to be answered with regard to the long term.

2 One of the issues that I'm not
3 sure was fully appreciated before was end of life
4 issues are now starting to be more deeply thought
5 of in our municipality and we would like to see
6 very closely how those issues may impact us and
7 what the long term plans are. We feel that to be
8 responsible to our constituents that it is our
9 duty to look very deeply at these issues and I
10 suppose that is probably really what we are trying
11 to accomplish here.

12 I would like to say as well that
13 in our area we are the smallest community by
14 population in the CANDU family, I suppose, and we
15 also have the largest facility. So the impacts
16 and implications are probably more magnified with
17 our region than they would be in others.

18 The nuclear industry, OPG and its
19 predecessor Ontario Hydro, have been very good
20 corporate citizens over the years. We have had a
21 good long term relationship with them. But as
22 they evolve we feel that we also need to be
23 proactive in our involvement with them to make
24 sure that the path forward is beneficial and works
25 properly for both parties, or for all three

1 parties in the case that we now have. So that is
2 what we are trying to accomplish.

3 MEMBER GIROUX: Thank you. That
4 is a very informative answer.

5 I think I do understand the
6 climate of the discussions within council was not
7 reflected completely in their resolution. The
8 resolution is straightforward. What you are
9 telling me is that the climate did contain some of
10 these observations that you made. There was an
11 expectation.

12 The comment I would make on that
13 is that this is somewhat new ground. We have been
14 used, in the past here in the Commission, to
15 having elected representatives from the
16 municipalities around Bruce, and especially
17 Kincardine and others, come here and support OPG's
18 applications without reservations. Now there is a
19 new twist to it, that it is linked to an
20 understanding with OPG, as you have explained, and
21 I think these are valid reasons. It is also
22 linked to some financial considerations. So if
23 one takes a very critical reading of the
24 situation, your endorsement doesn't appear
25 objective as it did in the past when there was no

1 visible link.

2 There is a link now. You are
3 talking about essentially a partnership in
4 preparing the future and, as I say, I am not
5 challenging the reasons for that, but just the
6 perception might be different in the weight we can
7 give to your endorsement because of a closer link
8 with OPG.

9 I think what has to be done is not
10 change your behaviour, I have nothing to say about
11 this, but just to make these things very clear and
12 have it on paper that you have this sort of
13 agreement but that your position is not related to
14 the understanding itself and to the other aspects
15 of the understanding.

16 THE CHAIRPERSON: Would you like
17 to comment briefly?

18 MR. KRAEMER: If I may.

19 Your observation is on point. I
20 don't think that before the time that we have now
21 the changes that have been seen in the industry I
22 believe in the last couple of years have been
23 without precedent in the Canadian industry before,
24 particularly in Ontario.

25 We are now going through -- well,

1 we have gone through the first privatization of a
2 nuclear facility in Canada -- which I am sure the
3 Commission is well aware of, you would have been
4 deeply involved in this. We supported that fully,
5 as well as essentially privatization of OPG and
6 division into various assets.

7 From a community point of view we
8 see many differences in our relationship between
9 dealing with a wholly owned provincial corporation
10 or monopoly and dealing with individual private
11 companies which can be devolved in their ownership
12 which requires, we think from our perspective,
13 perhaps more diligence -- or particularly in the
14 transition phase which we feel that we are in
15 now -- and then there is privatization of the
16 market itself which is coming very soon in Ontario
17 has other implications for us as well.

18 So I think those are many of the
19 reasons why at this point in time we feel that we
20 are in transition with the industry.

21 The industry is by far the largest
22 employer in our community and we have always been
23 very supportive. We still are very supportive of
24 it but we have some questions that we feel are
25 necessary to answer from many perspectives. That

1 is what we are trying to do and we are trying to
2 do it in a very responsible manner.

3 As you can imagine, not everybody
4 agrees every time on the right path forward and it
5 becomes a decision of councils, like in any other
6 governing body, done by a majority of votes.

7 These decisions have been made to
8 this point by consensus. Our decision to support
9 and endorse this memorandum of understanding was a
10 unanimous decision of council.

11 THE CHAIRPERSON: Dr. Barnes?

12 MEMBER BARNES: As a follow-up to
13 Dr. Giroux's comments, you say that in the MOU
14 this will include a review of the study which has
15 been contracted to examine the technical
16 feasibility and other related considerations of
17 the long-term management of low and intermediate
18 waste and that the MOU calls for OPG to provide
19 financial support to offset costs of review
20 reports and travel.

21 In the process by which your
22 council will review this technical study, do you
23 have in a sense a technical competence on the
24 council to do that kind of analysis of a technical
25 report, or does this process mean that you will

1 now have funds to hire consultants to give you
2 guidance on that?

3 How do you see the process of
4 reviewing a pretty technical report?

5 MR. KRAEMER: The technical report
6 is one part of it. We see it as a method to
7 examine the various options available to see
8 whether we agree with the general thrust that is
9 being developed on both time frame and long-term
10 plans.

11 The idea behind this, I believe,
12 is to examine all the options in conjunction with
13 OPG, I suppose from more of a team approach in
14 this regard to see what we feel would and could be
15 acceptable to the community for longer term
16 things, and also to try to get it straight in our
17 own mind how this plays out with the implications
18 of the C-27 process.

19 I am sure you are aware that the
20 Bruce site has a few things which -- and OPG may
21 or may not like this -- we feel make it somewhat
22 unique in its size and its scope and because of
23 the fact that it has all three levels of waste on
24 the one site, and also some of the larger
25 decommissioning requirements at end of life.

1 We would like to try to find the
2 best and most appropriate path. We don't claim to
3 be experts, but we feel that we, as the political
4 leaders, can make informed judgments and can ask
5 and should ask our constituents for guidance in
6 these issues if a passforward becomes identified.

7 Does that answer your question?
8 Did I get where you need to go on that?

9 THE CHAIRPERSON: Mr. Kraemer, my
10 question is with regard to the timing of the MOU.
11 Could you conceive that the MOU could have been
12 created and signed outside of the licensing?

13 I am trying to understand the
14 connection to the renewal of the licence per se.
15 It seems to cover broader issues.

16 Could you give us a sense of the
17 connection or the timing with regard to the
18 licence application?

19 MR. KRAEMER: It may be necessary
20 for you to ask OPG for their comment on this as
21 well.

22 Since basically the Bruce Power
23 transfer of about a year ago, the municipality has
24 been looking into the impacts in the community,
25 both positive and negative, and has been trying to

1 reach an agreement with OPG. I would imagine that
2 particularly senior staff have had much to deal
3 with lately and have had many things other than
4 just the municipality to look at, which I would
5 imagine required much of their senior staff
6 attention.

7 The CNSC relicensing was seen, I
8 believe -- and you will have to understand that I
9 can't speak for every person there personally.
10 But I believe it was seen as a crossroads and that
11 we needed to have a clear path forward. That is
12 why this fork in the road or why this was done
13 this way, I believe.

14 You are taking my opinion here as
15 a personal opinion, not as a direction of the
16 council's.

17 THE CHAIRPERSON: Would OPG like
18 to comment on that?

19 MR. DICERNI: Thank you. My name
20 is Richard Dicterni, from Ontario Power Generation.

21 I would make three points in
22 response to your question.

23 As the Mayor has said, over the
24 last 12, 18 months there has been a number of
25 developments within the nuclear industry, within

1 the electricity industry, which have I think
2 changed the operations at the Bruce -- changed not
3 just in terms at least to Bruce Power but changed
4 the dynamics in terms of what OPG still has up
5 there versus what Bruce Power has.

6 Change as it relates to the WMO is
7 another piece of change. The federal government
8 did bring in legislation -- it has cleared the
9 House and it is now before the Senate -- which
10 redefines the roles of OPG and the other industry
11 players.

12 As a result of these types of
13 changes, the municipality has taken stock of the
14 whole situation and said: Where do we go from
15 here?

16 My first point is that there have
17 been quite a few changes which have led to the
18 municipality taking stock of what role it wants to
19 play in the WMO process, what role it wishes to
20 play in regards to low and intermediate waste.

21 We have had discussions over the
22 last six, seven, eight months which have
23 dovetailed in some respects with the relicensing
24 of the Western Waste Management Facility.

25 I say dovetailed, because it could

1 be in part a coincidence; it could be in another
2 part a nice coincidence of mutual interests coming
3 together.

4 We have always wanted to address
5 the issue of low and intermediate waste in a more
6 systematic basis. We have a reference plan for
7 financial purposes. We have always wanted to move
8 to the next step in terms of what do we do once
9 the high level waste has been dealt with, which we
10 believe from a process perspective, as a result of
11 C-27, is on the way.

12 It was good timing for us and the
13 municipality, I would think, shared that with you.

14 THE CHAIRPERSON: Are there
15 further questions?

16 Thank you very much, Mr. Mayor.

17

18

19 **02-H8.3**

20 **Oral presentation by Citizens for Renewable Energy**

21 THE CHAIRPERSON: We will move now
22 to the next oral presentation, which is scheduled
23 from Citizens for Renewable Energy.

24 I understand that Mr. Kleinau will
25 present the organization's views, as outlined in

1 CMD document 02-H8.3.

2 Welcome, Mr. Kleinau.

3 MR. KLEINAU: Thank you very much.

4 Good morning, everybody. Thank
5 you for the opportunity to appear at this hearing.
6 My name is Zigmund Kleinau, better known as Ziggy,
7 and I am the Co-ordinator for Citizens for
8 Renewable Energy, CFRE, an incorporated non-profit
9 organization of over 1,000 members, with a large
10 number of them residing in Bruce, Grey and Huron
11 Counties.

12 I was hoping to have the Board
13 Member of Eastern Ontario with me today,
14 Mr. George Wright, but unfortunately he had to
15 stay away because of illness.

16 After reviewing CMD 02-H8 and
17 CMD 02-H8.1, we have deemed it necessary to appear
18 before this Commission to raise a number of issues
19 and concerns.

20 We are not really happy with a
21 change in this hearing presentation, because we
22 were expecting CNSC staff to present their side of
23 the issue. I just wanted to mention that.

24 We are impressed, but not
25 surprised, by the smugness in the tone of OPG's

1 submission. Of course, they feel the need to put
2 themselves in the best light boasting about their
3 performance over the last three licence periods to
4 make their case for a five-year licence renewal.

5 Pointing to "proven regulatory
6 compliance" as one of their rationale for more
7 than doubling their licensing period, they are
8 being exposed by CNSC staff in their report, under
9 10.0 "Reportable Events". At least two events
10 occurred during this last operating licence and
11 one during the years from 1996 to 1999.

12 What is "proven consistent
13 problem-free operation" at the WWMF, according to
14 page 6?

15 According to 7.31, Airborne
16 Emissions Control, OPG is quoted as recognizing
17 the existence of some unmonitored fugitive
18 releases of volatile tritium and carbon-14 to air
19 from the site. We happen to call this a major
20 problem, especially with the extremely long
21 half-life of Carbon-14, namely 5,730 years.

22 We just hope that the president
23 and Commission members are aware of the
24 devastating health effects of this radionuclide,
25 causing the worst form of blood cancer, aplastic

1 anaemia.

2 The statement on page 3 of CMD
3 02-H8.1 that the hypothetical radiation dose to
4 the public from all C-14 sources on the BNPD site
5 has been consistently very low in previous years
6 is full misleading as monitoring for this
7 alpha-emitter has only been in effect since the
8 year 2000, partly because of pressure coming from
9 this organization.

10 We consistently find these
11 high-handed statements in the OPG submission.

12 We question the safety and
13 economics of transporting especially the
14 Intermediate Level Radioactive Waste, the IMLW,
15 from Darlington and Pickering to the Bruce site.
16 This highly dangerous material is being trucked on
17 a regular basis through densely populated areas.
18 It should be closely safeguarded during those
19 long-distance trips, especially since terrorist
20 action even here can never be discounted.

21 I note the hesitancy of the Bruce
22 community to accept the waste from other stations,
23 and I can't understand why this intermediate level
24 waste especially cannot be stored right at the
25 Darlington and Pickering sites in a similar way as

1 the Bruce Power waste is being stored at the Bruce
2 site at the WWMF.

3 Surely both facilities have enough
4 space to accommodate them. Pickering already
5 harbours its used fuels in their dry storage
6 facility. And long-term high level storage is a
7 particular concern to this organization, because
8 we know that it is a very, very dangerous site
9 where it is being stored that close to the shore
10 of Lake Huron. We really need to have a closer
11 look at this.

12 We know that construction approval
13 has been given by the Commission for this
14 operation, but the operating approval definitely
15 needs a public hearing. We appeal to the
16 Commission for that.

17 The problem with tritium effluent
18 containment especially in the groundwater régime
19 is once again understated. If levels in WSH-231
20 have increased by at least 2,000 Bq/l over a
21 three-month period up to January 2002, what gives
22 OPG the idea that tritium will disappear by as
23 much as 7,000 Bq/l within a few months,
24 stabilizing in well WSH-231 at 5,000 Bq/l, when
25 Figure 2 in the application shows a steadily

1 increasing trend over the last nine years even
2 without those recent "spikes"?

3 We call that in conservative
4 language "wishful thinking" and hope the
5 Commission and its staff will not fall for it. We
6 expect that the environmental risk assessment will
7 be renewed with this licence.

8 In regard to the Low Level
9 Radioactive Waste (LLRW) incinerator, CNSC staff
10 mentions in its report, at page 9, that
11 non-radioactive substances released from this
12 facility have been measured by OPG at intervals to
13 demonstrate compliances.

14 Then, somewhat tongue in cheek,
15 they state that these measurements were taken
16 three times over the past five years. This is
17 unbelievable. Not even once per year? Even if it
18 would have been three times per year over five
19 years, there is an explanation for this
20 lackadaisical safety approach.

21 This over 25-year-old incinerator
22 has been for some time now the largest point
23 source for dioxin in Canada. This is the most
24 toxic substance on the Schedule 1 of CEPA. The
25 Ministry of the Environment could do nothing to

1 enforce abatement because there are only
2 guidelines in place which cannot be enforced.

3 We will be watching closely the
4 performance of the new so-called state-of-the-art
5 incinerator once it is in service.

6 We are very concerned with the
7 safe operation of the newly installed shredder.
8 In the process of shredding any kind of material,
9 dust is created. Shredding radioactive wastes
10 means dangerous dust particles are released and
11 need to be captured and safely contained.

12 What kind of safety measures are
13 in place for this operation?

14 Numerous liquid chemicals are
15 stored at or near the WWMF in above-ground or
16 in-ground tanks. Quite a few of them are
17 extremely flammable. It is significant that the
18 new draft licence contains specific fire
19 protection requirements.

20 We have known for quite some time
21 that slightly radioactive lubricating oils are
22 being stored in precarious conditions. Fire
23 safety apparently has never been a priority of
24 OPG. It is an expense which cannot be spared.

25 These licence conditions are not

1 very firmly put into the new draft licence, and we
2 definitely need to see special dates for complying
3 with them. Staff certainly does not seem to be
4 familiar with the precautionary principle. There
5 are a lot of problems once something happens, and
6 prevention is always the best way to approach
7 these issues.

8 The co-ordinator and several
9 members of CFRE attended a tour at the waste
10 management facility conducted by OPG last year.
11 We were unable to evaluate operation of the
12 incinerator as it happened to be out of service
13 for maintenance. We were not allowed access to
14 the LLWS buildings, and reasons were not given.

15 Overall impression of the facility
16 was not favourable, even though a massive
17 spruce-up effort was evident.

18 In conclusion, we point to the
19 following problems which need to be addressed
20 before licence renewal is acceptable to this
21 intervenor.

22 The conditions requiring an
23 environmental risk assessment to be reinstated for
24 the elevated levels in WSH-231 and to examine the
25 underground plume travel toward Lake Huron.

1 Interim Derived Release Limits
2 have to be revised and new Action Levels accepted
3 by CNSC staff before a licence renewal is granted.
4 We can't wait until year's end to accommodate
5 OPG's tampering with these issues affecting human
6 health.

7 All transport of Intermediate
8 Level Radioactive Waste coming into the BNPD site
9 to be provided special guards for protection by
10 OPG.

11 OPG stated that they have been
12 consulting with the communities on the different
13 transport routes. We just wonder if that also
14 extends to the communities from Darlington and
15 Pickering all the way up to the Bruce site.

16 Decommissioning plans and
17 consolidated financial guarantees should be
18 provided to the Commission before decision day for
19 deliberation on renewal.

20 Performance of the new incinerator
21 to be tested and verified to new standard by an
22 independent expert before a full commissioning.

23 We strongly object to extending
24 the licensing period to five years. Acceptance of
25 OPG's request will be seen as wilful exclusion of

1 public scrutiny and matters of environmental and
2 health effects.

3 OPG's statement under 4.4,
4 regulatory compliance, that "all regulatory
5 commitments have been met and all licensing
6 documentation is up-to-date" is fully misleading.

7 If the President and Members are
8 contemplating to grant OPG's request for an
9 unprecedented five-year licence renewal we cannot
10 help but remind them of their commitment to the
11 public in CNSC's Mission Statement. It would be a
12 clear violation.

13 I would also like to make this
14 statement that the Commission is walking a fine
15 line. We have seen problems arising in July 1997
16 with the report that came out stating that a lot
17 of the promises of Ontario Hydro at that time had
18 not been fulfilled, and that it had certainly a
19 very poor record of being maintaining the reactors
20 and also a very poor record for the management and
21 staff of Ontario Hydro at that time.

22 So I would just like to throw this
23 in at the conclusion, and I thank you again for
24 accepting our submission. We sincerely hope it
25 will receive serious consideration.

1 Thank you.

2 THE CHAIRPERSON: Thank you.

3 We will open the floor for
4 comments or questions from the Commission Members.

5 Dr. Giroux?

6 MEMBER GIROUX: Thank you.

7 My first point would be, I think,
8 to ask staff to respond. On page 3 of Mr.
9 Kleinau's submission, he makes what is essentially
10 an allegation that staff would be concurring in
11 sort of hiding results, poor performance results
12 from the incinerator.

13 He mentions that after OPG had
14 said that things had been measured at intervals,
15 there were three measurements taken over five
16 years, and then saying that "there is an
17 explanation for this lackadaisical safety
18 approach" and that the incinerator would have been
19 a source of dioxin.

20 I think there is an allegation
21 which staff should have the opportunity to respond
22 to and state their views.

23 MS MALONEY: It's Cait Maloney.

24 I will ask Dr. Ferch to comment on
25 staff's work on this area, and also that of the

1 Ministry of the Environment who actually certified
2 the incinerator.

3 DR. FERCH: I guess I will start.
4 The incinerator still meets current standards.
5 The incinerator was installed, hazard certificate
6 of authorization from the province and met the
7 standards at that time and meets the standards
8 which apply right now. It will not meet the
9 standards which will come into legal effect in
10 2006 which is why the incinerator is being
11 replaced.

12 It is being shut down and being
13 replaced by a new incinerator which will meet
14 those new limits.

15 I think for questions on the
16 specifics of releases from the incinerator
17 monitoring, and so on, I would like to ask
18 Dr. Thompson if she would like to make some
19 comment.

20 DR. THOMPSON: For the record, my
21 name is Patsy Thompson.

22 Under the certificate of approval
23 from the Ministry of the Environment, the
24 incinerator was tested and there is an approval
25 for a volume of waste and waste characterization.

1 The testing was done first on a regular basis to
2 check emission rates based on the waste being
3 incinerated.

4 The provisions normally is that if
5 there is a change in waste characterization then
6 testing would resume to make sure that the
7 emissions are still meeting the requirements of
8 the certificate of approval.

9 Since the waste being incinerated
10 by OPG has not changed significantly in terms of
11 characteristics, the Ministry of the Environment
12 does not require any frequent monitoring of stack.
13 So essentially the three times over a five-year
14 period stack monitoring that OPG has done meets
15 the requirements of the Ontario Ministry of the
16 Environment.

17 The incinerator is a large point
18 source of dioxins and one of the reasons it is
19 being replaced is to meet the new Canadian Council
20 Ministers of the Environment Guideline on
21 Incinerators to deal with the dioxin issue.

22 MEMBER GIROUX: Thank you. If I
23 may go on?

24 THE CHAIRPERSON: Yes, please.

25 MEMBER GIROUX: I will address the

1 question now to Mr. Kleinau.

2 You state, again on page 3, that
3 you and some of your colleagues have been on a
4 tour of the facility and you mention that your
5 overall impression was not favourable.

6 Could you explain to me on what
7 points that statement is founded?

8 MR. KLEINAU: That statement is
9 founded on the point, for instance, that we are
10 not allowed to really investigate the whole way of
11 how the waste is being stored. We were not
12 allowed to get close to the low-level storage
13 buildings and also we had always like I would say
14 problems to get answers to our questions regarding
15 the level of measuring the different releases from
16 the incinerator and we felt that that should have
17 been provided.

18 MEMBER GIROUX: Did you come in
19 with equipment to attempt to do measurements?

20 MR. KLEINAU: Pardon me?

21 MEMBER GIROUX: Did you go to
22 visit with equipment to take measurements?

23 MR. KLEINAU: I had my radiation
24 alert with me, but I didn't use it.

25 MEMBER GIROUX: Can OPG comment on

1 that?

2 MR. KLEINAU: Pardon? I couldn't
3 hear you.

4 MEMBER GIROUX: I'm asking OPG,
5 could OPG comment on that visit and if there were
6 any restrictions to what the visitors could see?

7 MR. NASH: Ken Nash. I will first
8 of all provide a comment and Hugh Morrison will
9 add to my comment as necessary.

10 With regard to the low-level
11 storage buildings, the protocol that was
12 established for the tour day -- and all our staff
13 who were monitoring and conducting this tour were
14 instructed to follow these rules -- was that a
15 low-level storage building would be open, the door
16 would be open, but visitors were not allowed to
17 actually enter the building. They could view the
18 waste from the outside of the building. The staff
19 were instructed to behave accordingly and that is
20 what happened.

21 Hugh Morrison was there in part
22 when the tour was being conducted and may want to
23 add to those remarks.

24 MR. MORRISON: I guess I would
25 just like to comment on the general response that

1 we got to the tours that we had. The general
2 response that we got in terms of response from the
3 public, in terms of when they had finished the
4 tour, they found that the staff was pretty capable
5 and quite informative about the facilities and
6 that the facilities were neat and orderly.

7 At that particular time the
8 incinerator was shut down for maintenance over
9 that weekend, and to be perfectly honest we were
10 quite happy that it was shut down for maintenance
11 because if you are touring many people past it,
12 then that reduces some complications.

13 In terms of the low-level storage
14 buildings, they have a large door. The large door
15 was open and people could see quite clearly how
16 the material was stored and, as Ken said, those
17 certainly are in accordance with our radiation
18 protection requirements and that's why we didn't
19 allow people into the buildings.

20 MEMBER GIROUX: Thank you.

21 Again to Mr. Kleinau. Concerning
22 the recommendation by staff for a five-year
23 licence, you have again strong words, "wilful
24 exclusion of the public", but in other cases we
25 have done it by specifying that there should be a

1 mid-term report which might give -- and this has
2 been specified by us, that there should be an
3 opportunity for the public also to intervene on
4 the mid-term report.

5 Would that be a more satisfactory
6 issue? It would be every two and a half years
7 instead of every two years, which is not once
8 every five years. Would you comment on that?

9 MR. KLEINAU: We would be
10 receptive to having this mid-term report presented
11 and also to have public consultation on that
12 because we feel that there is a lot of water going
13 down the river, so to speak, between now and those
14 two years, five years especially.

15 Also with the new era of
16 deregulation, because we don't know who is going
17 to run this plant, this waste management site in
18 maybe three years from now with the possibility of
19 privatization. All this needs to be really put
20 before the public to have that looked into.
21 That's our position. We need to have a
22 participation process in that.

23 THE CHAIRPERSON: Dr. Barnes?

24 MEMBER BARNES: I just wanted to
25 follow up again on a point that Dr. Giroux made,

1 and a question perhaps to Dr. Thompson, and that's
2 again the business of the Ontario Minister of
3 Environment monitoring non-radioactive substances
4 on a time scale of three times over the past five
5 years.

6 Could you convince me that that is
7 an adequate sampling to "demonstrate compliance
8 with provincial regulations"? Maybe you could put
9 that in the sense of how much variability would we
10 expect of emissions of this type from the stack.

11 DR. THOMPSON: Normally the --
12 sorry, this is Patsy Thompson for the record.

13 Normally the certificate of
14 approval requirements for stack monitoring are
15 based on emission inventories done. Essentially
16 what they look at is the waste that will be
17 incinerated, the efficiency of the burners of the
18 incinerator, and from this they derive emission
19 factors. This is normally how the incinerator
20 performance will be assessed.

21 There are initially when an
22 incinerator is put on line enhanced requirements
23 for stack monitoring to make sure that the
24 emission rates have been well established.

25 Once this is done, unless the

1 performance of the incinerator decreases, or the
2 characteristics of the waste change, then the
3 emission factors are quite stable and essentially
4 the stack monitoring that OPG has conducted
5 periodically has shown that what they are
6 measuring in a stack would be what is expected
7 from calculations done with emission rates.

8 THE CHAIRPERSON: Mr. Graham?

9 MEMBER GRAHAM: In Mr. Kleinau's
10 presentation, on page 3, he refers again to fire
11 protection. My question I guess would be to CNSC
12 staff. He said, "we have known for quite some
13 time of slightly radioactive lubricant oils are
14 being store in precarious conditions". Is that
15 correct, or would you like to clarify that, and so
16 on?

17 DR. FERCH: Richard Ferch
18 speaking.

19 There are some contaminated oils
20 that are stored at the Western Waste Management
21 Facility in a building with fire detection, fire
22 suppression system, alarm system, the building
23 meeting the codes that are in effect for that
24 building. So they are stored safely.

25 Further, the hazard to the public

1 of a fire affecting those oils has also been
2 assessed in the safety report, and the calculated
3 dose to members of the public is a very small
4 fraction of the dose limit, less than 1 per cent.

5 MEMBER GRAHAM: Could you -- maybe
6 this should be to OPG -- give us an idea of the
7 quantity of oil being stored in that building?

8 MR. NASH: We are not exactly sure
9 of the quantities. I will find it in a moment,
10 but in a low-level storage building there is
11 8,000 m³ of available space and the storage of the
12 oils is a small fraction of that. But we don't
13 have the exact number at the tip --

14 MEMBER GRAHAM: My question then
15 should be put in this way. Are the oils stored in
16 a building by themselves, or are there other
17 materials that have perhaps more reason to cause
18 fire in the same building?

19 MR. NASH: They are stored in the
20 same buildings as other materials. There is a
21 kind of a space segregation between them and, as
22 mentioned earlier, there is fire detection, fire
23 suppression systems there. I believe that one of
24 my colleagues does have the estimated quantity of
25 material of oil stored there.

1 DR. KHAN: Sorry. My name is
2 Atika Khan. I don't have the estimated quantity,
3 but I can tell you that the safety assessment that
4 was carried out was based on an extremely
5 conservative assumption which was 50 per cent of
6 the building full of this oil which is an
7 extremely conservative assumption given the fact
8 that it's usually a small fraction of the building
9 base that contains oil. Even this conservative
10 assumption gives us a maximum of 9 microsievert
11 which is less than 1 per cent of the annual public
12 dose in an accident condition. So you can imagine
13 the consequences of any such fire would be
14 extremely small.

15 MEMBER GRAHAM: The only other
16 question I have is: Is the type of fire
17 suppression -- the method that was given to me
18 earlier this morning in one of my other questions,
19 is that the same that would be used on oil as on
20 other materials that are being stored?

21 MR. NASH: Yes, it's the same
22 detection system and the same fire suppressant
23 system.

24 THE CHAIRPERSON: Thank you very
25 much, Mr. Kleinau.

1 I would just like to, on behalf of
2 the Commission, assure you that all our
3 interventions receive very serious consideration
4 by the Commission in rendering our decisions which
5 was one of the points that you made in your
6 remarks.

7 Clearly if there are any ownership
8 changes that take place with regards to any
9 facilities that we licence, this will require
10 consideration by the Commission directly which
11 would be a public hearing. So ownership changes
12 per se would be subject to consideration by us --
13 just to comment on a couple of areas that you
14 discussed.

15 Thank you very much.

16

17

18

19 **02-H8.4**

20 **Oral presentation by James M. Cameron**

21 We will now move then to the oral
22 presentation by Dr. James Cameron as noted in
23 document CMD 02-H8.4.

24 Dr. Cameron, are you with us?

25 Good morning. Thank you for

1 coming.

2 DR. CAMERON: Thank you. My name
3 is Jim Cameron. I am a resident of the
4 Municipality of Kincardine. Let me thank you in
5 advance for your consideration of my presentation.

6 I am a supporter of the role that
7 nuclear energy has played and can play in the
8 future, in both our national and local economies
9 and in my community.

10 I would like to speak briefly to a
11 number of points that I raised in my earlier
12 written submission.

13 Mayor Kraemer has reported earlier
14 that the municipality has entered into a
15 memorandum of understanding with OPG regarding
16 future community impacts as they relate to low and
17 intermediate-level waste currently being dealt
18 with at the Bruce site. I congratulate the
19 council for their initiative in this regard.

20 However, this memorandum does not
21 deal with the issue of dry storage of high-level
22 waste.

23 In my career I became familiar
24 with staff reports, technical documents and legal
25 opinions. However, and notwithstanding my

1 advancing years, it took me some time to actually
2 figure out the essential elements of this
3 particular application. Let me state my
4 understanding.

5 This public hearing was called by
6 the CNSC for renewal of OPG's licence previously
7 for two years to handle only low and
8 intermediate-level waste at the Bruce site.

9 A point worthy of note is that
10 local newspaper advertising for this licence
11 renewal gives absolutely no indication that
12 high-level wastes would be part of this hearing
13 process.

14 CNSC staff has recommended a
15 five-year renewal, one assumes on the basis of
16 positive past performance of low and
17 intermediate-level waste operations on this site.

18 In October of last year OPG
19 applied for an operating licence to deal with dry
20 fuel storage of high-level waste, material that
21 may eventually have to be buried underground for
22 thousands of years. At present, these facilities
23 are still being constructed. No operating licence
24 or amendment has been granted to date.

25 Let me note your staff's report to

1 the Commission on March 1st of this year
2 discussing their new approach, or proposed new
3 approach, to recommending licence periods.
4 References are made to "effectiveness and
5 efficiency" and "unnecessary regulatory burden".

6 I am sure such issues are at least
7 partially driven by budgetary constraints.

8 If, and or when the Commission
9 begins to experiment with these new proposals,
10 these words must be interpreted and implemented in
11 a highly cautious and responsible manner,
12 obviously by the Commission acting on behalf of
13 the public.

14 Let me give your staff full points
15 for forthrightness in their report of March on
16 licensing issues. I quote:

17 "Licensees have also noted
18 that the two-year licensing
19 period is a significant
20 regulatory burden and has an
21 impact on financing given
22 that the financial
23 marketplace looks for
24 regulatory stability."

25 I would only note and emphasize

1 that the grey swamp between regulatory burden and
2 environmental protection must be waded through
3 with caution and wisdom, particularly in the area
4 of nuclear safety.

5 Because of the physical size and
6 geographic location of the WWMF, it would not be
7 possible from an environmental and safety
8 monitoring point of view to allow two different
9 operating licences -- for example, for a period of
10 five years and two years -- at this particular
11 site.

12 It is self-evident that a new
13 site-specific location, a new waste containment
14 mode and a new storage facility for high-level
15 waste are all being applied for at the Bruce site.

16 At Pickering high-level waste
17 storage has been approved for several two-year
18 licensing periods. However, the Bruce site for
19 high-level waste has not even begun operations,
20 yet a five-year licence is being suggested.

21 I would ask the Commissioners
22 whether in New Brunswick, Quebec or Ontario a new
23 site for the dry storage of high-level radioactive
24 waste has ever been approved for a licence period
25 of longer than two years for a site which has

1 never had any site-specific record of handling
2 this material.

3 To state, as OPG has, that the
4 operation of the Bruce site is simply a repeat of
5 the proven operation of the Pickering used fuel
6 dry storage facility is without credibility and
7 cannot be taken seriously.

8 Let me make several points here.

9 One, these sites are
10 site-specifically different and are several
11 hundred kilometres from each other.

12 Two, the operating staffs are, by
13 definition, different.

14 Three, the Bruce site is only now
15 completing construction and has no operating and
16 no environmental impact history as it relates to
17 dealing with high-level radioactive waste.

18 In my opinion, it would be
19 inappropriate to approve a licence for five years
20 for dry storage of high-level waste as a tag-on or
21 amendment to a five-year licence renewal for low
22 and intermediate waste storage.

23 In essence, this is what is being
24 recommended by CNSC staff.

25 Such a slight of hand would, in my

1 opinion, do serious damage to the credibility of
2 the CNSC and its legitimate long-term
3 responsibilities in this critical area. Any
4 credible licensing process must be both reasonable
5 and rational.

6 As stated in the Nuclear Safety
7 and Control Act, an objective of the Commission is
8 to:

9 "...prevent unreasonable risk
10 to the environment and to the
11 health and safety of
12 persons..."

13 I would submit that it would be
14 reasonable to grant a five-year licence to the
15 Western Waste Management Facility and clearly
16 unreasonable to approve any longer period.

17 The Nuclear Safety and Control Act
18 makes it clear that it is the responsibility of
19 the Members of the Commission, not the applicant
20 and not the CNSC staff, to make the necessary and
21 appropriate decisions to act in the public
22 interest, both in the short and long term.

23 Thank you very much for your time
24 and consideration.

25 THE CHAIRPERSON: Thank you,

1 Dr. Cameron.

2 The floor is now open for
3 questions to Dr. Cameron from the Commission
4 Members.

5 Dr. Giroux.

6 MEMBER GIROUX: I think we should
7 hear a response from staff on the question of the
8 licence duration.

9 If my memory serves me right --
10 and I have a note here -- I think we approved the
11 licence for construction of the dry storage
12 facility back in January 2000, and this is under
13 construction presently.

14 MS MALONEY: That is correct,
15 Dr. Giroux. There was an environmental assessment
16 performed, and then construction approval was
17 given in January of 2000.

18 MEMBER GIROUX: Construction is
19 going on at the present time, and OPG will have to
20 apply for an operating licence and a commissioning
21 licence whenever it is ready and construction is
22 done.

23 Is that correct?

24 MS MALONEY: That is correct.

25 They will have to move for permission to start

1 filling the facility, yes.

2 MEMBER GIROUX: If the Commission
3 were to grant the five-year licence which is being
4 applied for at the present time, this does not
5 entail an operating licence for the dry storage
6 facility, the high-level waste.

7 MS MALONEY: That is correct.
8 There will have to be approval given for that.

9 MEMBER GIROUX: The duration of
10 that licence would be considered at that time?

11 MS MALONEY: Excuse me for one
12 moment.

13 --- Pause

14 MS MALONEY: There is a
15 possibility that this could be done through an
16 amendment to the new licence rather than coming
17 forward to the Commission for approval for a new
18 licence. That, of course, could be done either by
19 the Commission or through amendment to be signed
20 by the designated officer, which is me.

21 MEMBER GIROUX: Has this been done
22 in the past, to have a designated officer give an
23 operating licence for high-level waste management?

24 MS MALONEY: I am going to ask
25 Dr. Ferch to respond.

1 DR. FERCH: I can't speak for sure
2 to high-level waste. But in general, there have
3 been precedents where the construction approval
4 was heard during a hearing. The issues then were
5 determined during the hearing for construction
6 approval, and then the actual approvals for
7 various stages of commissioning and operation are
8 granted in a stage-wise fashion as amendments to
9 the licence by designated officers.

10 The examples I am thinking of
11 relate to reactors.

12 There is a precedent in the sense
13 that the issues are heard at the time of the
14 construction approval, and then the plan, which
15 involves step-wise approvals at appropriate
16 stages, is carried out by the designated officer.

17 MS MALONEY: Dr. Giroux, perhaps I
18 could supplement and amplify what Dr. Ferch has
19 said. Both the environmental assessment and the
20 construction licence actually looked at the full
21 scope of the project. This was not just looking
22 at the first step and that the rest would be done
23 without public awareness. You considered that at
24 that stage, in 1999 and 2000.

25 MEMBER GIROUX: So there is a

1 point in fact to Mr. Cameron's allegations that
2 there might be no public scrutiny of the first
3 years of operation and they might be allowed to
4 operate for whatever time they have within the
5 five-year licence after they have started
6 operating.

7 MS MALONEY: Until the mid-term
8 report, that is correct. Of course, if there are
9 any major issues, those will be brought
10 immediately to the Commission's attention.

11 MEMBER GIROUX: Thank you. That
12 clears it up.

13 THE CHAIRPERSON: Dr. Barnes?

14 MEMBER BARNES: Under that
15 scenario, the designated officer would determine
16 the term of that licence?

17 MS MALONEY: This would simply be
18 an amendment of the licence. There would be no
19 change to the term. It would just be moving from
20 construction to operation. The term of this
21 licence will be the term of that activity.

22 THE CHAIRPERSON: Dr. Cameron, a
23 brief comment, please.

24 DR. CAMERON: In response I think
25 to the point your staff was making, perhaps I was

1 not clear.

2 A central issue here is the
3 duration of the licence. If a licence for five
4 years is in fact given in this case for the low
5 and intermediate, by definition it means that when
6 the designated officer or otherwise deals with it,
7 it will also be for a five-year period, not a
8 two-year period, which I think is more reasonable
9 with the initial operation of a high-level storage
10 facility that is not there at all and has no
11 record at all at that site.

12 By giving a five-year renewal on
13 the low and intermediate, by definition you are
14 automatically giving a five-year, because the
15 monitoring and the evaluation of the site is so
16 site-specific that you could not monitor for one
17 and not the other.

18 In conclusion, I would say that
19 the suggestion of the mid-term report is
20 inappropriate. A two-year licence would be
21 appropriate at that point. There is a track
22 record at the end of the two-year period. One may
23 want to give a licence for a longer period, but
24 there has been no experience on this site with
25 high-level storage of waste.

1 Thank you very much.

2 THE CHAIRPERSON: Thank you.

3

4 **01-H8.5**

5 **Oral Presentation by Integrated Energy Development**
6 **Corp.**

7 THE CHAIRPERSON: We will now move
8 to the next intervention, which is by Mr. James
9 Cook, as outlined in CMD document 02-H8.5 on
10 behalf of Integrated Energy Development Corp.

11 Mr. Cook.

12 MR. COOK: Good morning, Madam
13 President and Members of the Commission.

14 For the record, my name is Jim
15 Cook. I am President of Integrated Energy
16 Development Corp.

17 With me this morning is Mr. Sam
18 MacGregor, Chairman of that same corporation.

19 Integrated Energy Development
20 Corp., or IEDC, continues to be concerned with the
21 activities of Ontario Power Generation Inc. at its
22 Bruce Nuclear Power Development. This concern
23 increases each time the Canadian Nuclear Safety
24 Commission responds with relative indifference to
25 IEDC's comments when submitted through the "public

1 input" provision of the Nuclear Safety and Control
2 Act.

3 Madam President, I appreciate your
4 comments earlier this morning in that regard.

5 At this point in time, IEDC's
6 particular concern is OPG's request for a
7 five-year operating licence for its radioactive
8 waste operation Site-2, now known as the Western
9 Waste Management Facility at Bruce Nuclear, which
10 includes the nuclear waste fuel operation under
11 construction.

12 As stated previously in
13 correspondence and presentation to the CNSC,
14 IEDC's shareholders have invested substantial
15 capital in the Bruce Energy Centre and since the
16 BEC's location is contiguous to OPG's land base at
17 Bruce Nuclear, OPG's past, present and future
18 activities at Bruce Nuclear directly impact the
19 wellbeing of IEDC and the status of its land
20 development and greenhouse operation at the Bruce
21 Energy Centre.

22 In this regard, last year the
23 Municipality of Kincardine passed Bylaw 2001-23,
24 which was initiated by OPG, and defended by OPG at
25 an Ontario Municipal Board hearing in response to

1 an IEDC appeal of the subject bylaw.

2 The primary concern prompting IEDC
3 to appeal this bylaw was an attempt to afford
4 stakeholders the flexibility to more appropriately
5 determine future uses of the massive land base at
6 Bruce Nuclear in response to Ontario Hydro
7 becoming a segregated group of "business
8 corporations" rather than a provincially owned and
9 governed Crown Corporation. At that point in
10 time, Bill C-27 had had its first reading and was
11 being reviewed and debated by the federal
12 government in its effort to enable high-level
13 radioactive spent fuel from all commercial
14 Canadian nuclear reactors to be managed by one
15 Waste Management Organization, or WMO.

16 Adding to IEDC's concern was the
17 recognition that OPG and/or one of its subsidiary
18 business interests was pre-qualifying to propose
19 becoming that WMO and that Bylaw 2001-23 would
20 enable OPG the flexibility to prepare a
21 significant portion of its BNPD lands to quality
22 for aggregating all of Canada's nuclear fuel waste
23 at one site.

24 Because accumulating all of
25 Canada's nuclear fuel waste at one central

1 location was clearly addressed in Bill C-27, and
2 because of the resulting impact on BEC industries
3 and assets that would ensue, IEDC became
4 increasingly concerned with OPG's activities.

5 Prior to Ontario Municipal Board
6 hearing, IEDC requested OPG to simply confirm that
7 it would not utilize Bruce Nuclear lands to manage
8 nuclear fuel waste from nuclear generating
9 stations other than waste generated at Bruce
10 Nuclear and that Bruce Nuclear infrastructure
11 would be appropriately decommissioned with all
12 radioactive materials eventually moved at the end
13 of the life cycle of the Bruce Nuclear reactors
14 and generators.

15 No confirmation was forthcoming,
16 and in the end, and partly in response to OPG's
17 legal defence of the bylaw, the Ontario Municipal
18 Board ruled in favour of OPG's initiative.

19 As expected, Bylaw 2001-23
20 afforded OPG the extremely broad land use
21 flexibility it had had as an integrated part of
22 Ontario Hydro operating as a Provincial Crown
23 Corporation. Now Bill C-27, cited as the "Nuclear
24 Fuel Waste Act", has been passed through the
25 federal House of Commons and is rapidly

1 progressing into law.

2 Meanwhile, OPG continues to
3 prepare for the expansion of its medium and
4 low-level radioactive waste facilities at BNPD's
5 RWOS-2 where it sorts, incinerates, compacts and
6 stores intermediate and low-level radioactive
7 products from Bruce, Pickering and Darlington
8 nuclear facilities. Concurrently, OPG continues
9 to prepare for transferring and canisterizing
10 high-level irradiated fuel bundles (Nuclear Fuel
11 Waste) currently identified to be derived only
12 from Bruce Nuclear Generating Stations "A" and
13 "B".

14 The additional fact that all
15 contaminated garments from Bruce, Pickering and
16 Darlington nuclear facilities began to be
17 laundered at the Bruce site when Bruce Generating
18 Station "A" was laid up adds to IEDC's concern
19 that a central location for major nuclear waste
20 activity may be evolving at OPG's Bruce Nuclear
21 site.

22 Collectively, OPG's activities
23 indicate that perhaps it and others may have
24 already identified OPG's WWMF as the local
25 location for establishing one major centralized

1 management and storage facility for all of Canada
2 nuclear fuel waste, as well all low and
3 intermediate-level wastes.

4 OPG's initiative to
5 pre-incorporate appropriate subsidiary companies
6 with appropriate objectives also suggests that a
7 "Nuclear Energy Corporation", specifically OPG,
8 may already be established with the intent to
9 become the "Waste Management Organization", or
10 WMO, in the form of a separate legal entity for
11 the purpose of proposing approaches to the
12 Government of Canada for managing nuclear fuel
13 waste as determined by the pending Nuclear Fuel
14 Waste Act.

15 Since the WMO will be required to
16 complete a study to evaluate three approaches,
17 including deep geological disposal in the Canadian
18 Shield or storage at nuclear reactor sites or at a
19 centralized location either above or below ground,
20 the convenience of a 5,000-square-kilometre deep
21 salt deposit being situated around Bruce Nuclear
22 may qualify as one different method, if proposed
23 to the Government of Canada by the WMO. This
24 project further increases IEDC's concern that
25 OPG's entire agenda may not be being shown through

1 the CNSC public hearing process.

2 In the above regard, some 20 years
3 ago, in November of 1980, a Bruce operations
4 manager reported that radioactive waste now stored
5 in "swimming pools" will be solved eventually when
6 mechanisms are set up for storing it in rock or
7 salt caverns deep in the earth.

8 Twenty years later, in August
9 2000, OPG's Vice-President Nuclear Waste
10 Management Division identified two views on
11 storing nuclear waste, one being above ground up
12 to and beyond 50 years and the other to isolate
13 the waste in a stable geological formation, having
14 the ability to retrieve the waste if required.

15 The prospect of having some 18,000
16 tonnes of high-level radioactive nuclear fuel
17 waste gathered in one central location, with an
18 almost certain future supply ensured by the
19 expanding need for nuclear energy driven by the
20 consequence of climate change, begs the
21 development of a reprocessing facility
22 particularly if the "central depot" is at OPG's
23 massive land bank at Bruce Nuclear.

24 In this regard, Cameco Corporation
25 of Canada, being a significant partner with

1 British Energy through a lease agreement to
2 operate OPG's nuclear reactors at Bruce Nuclear,
3 has both the skills, experience and network and
4 perhaps the interest in pursuing this possibility.
5 Indeed, Cameco has business interests in Russian
6 nuclear waste, together with COGEMA of France,
7 which is a major European reprocessor of nuclear
8 fuel waste.

9 It is also possible that British
10 Nuclear Fuels, a major supplier and reprocessor of
11 nuclear fuel waste in Britain and of course known
12 by British Energy, would be interested in
13 processing Canada's nuclear fuel waste if it were
14 to be accumulated at one central location
15 affording adequate land availability.

16 As you know from prior submissions
17 and dialogue at the Nuclear Asset Optimization
18 Plan which shut down heavy water production, laid
19 up Bruce Nuclear Generating Station "A" and
20 rationalized the demolition of the Bruce Bulk
21 Steam System, IEDC is a strong proponent of
22 nuclear energy.

23 IEDC was also active at the Bruce
24 Energy Centre premised in part on expanding the
25 efficiency and diversity of CANDU reactors by

1 energizing process industry with nuclear-sourced
2 cogenerated steam and electrolytically produced
3 hydrogen and oxygen gases in harmony with off-peak
4 nuclear energy. Indeed, as reflected in a
5 schedule that has been provided to the Commission,
6 Atomic Energy of Canada, in March 2001, appears to
7 have recognized IEDC's activities at the Bruce
8 Energy Centre.

9 This recognition is clearly
10 illustrated on the pages identified: page 12,
11 dealing with hydrogen and methanol; page 15,
12 dealing with steam, electricity and hydrogen; page
13 16, dealing with Bruce Nuclear's return of nuclear
14 steam to the Bruce Energy Centre; and page 17,
15 IEDC's integrated process and thermal cascade.

16 Had the development of the BEC not
17 been compromised, thermal efficiency (or heat rate
18 for electricity generation) for CANDU reactors
19 would have been increased beyond the present 25 to
20 30 per cent through cogeneration. This, in turn,
21 may have significantly improved the international
22 competitiveness and attractiveness of CANDU
23 reactors just as the world is required to solve
24 the global consequence of climate change.

25 As well, the utilization of CANDU

1 reactors to expand beyond base load limitations
2 through the use of off-peak electricity for the
3 electrolysis of water to produce hydrogen and
4 oxygen as industrial feedstocks would have been
5 demonstrated.

6 Beyond that increased efficiency
7 through cogeneration and expanded diversity, using
8 power generation shift to water electrolysis,
9 major energy intensive industry adjacent to CANDU
10 reactors would demand discipline in preventative
11 maintenance and timely outages for appropriate
12 repair, ensuring supreme safety and operational
13 integrity.

14 Unfortunately, this can no longer
15 be accomplished. IEDC, on behalf of its
16 shareholders, is firmly committed to obtaining a
17 better understanding of OPG's ultimate strategic
18 plan for the Bruce Nuclear Power Development site,
19 including the subject of this hearing, the
20 extensive nuclear waste management facilities and
21 operations.

22 Accordingly, and in conclusion,
23 while IEDC recognizes the apparent track record to
24 date, as reported by albeit a biased applicant, it
25 similarly recognizes significant issues regarding:

1 First, the expansion of the site
2 early in the proposed licence period to
3 incorporate dry storage of spent nuclear fuel.

4 Second, the enactment of Bill C-27
5 and what some may refer to as the pre-planned
6 involvement of the Bruce facility and geography as
7 referenced above.

8 Third, the fuel re-processing
9 opportunities and experiences inherent in the
10 partners operating on the Bruce Nuclear site.

11 Finally, the degree of corporate
12 uncertainty and transition clearly evident in OPG
13 as it moves from a Crown corporation to an Ontario
14 business corporation and as reflected in
15 discussions of initial public offerings affecting
16 ownership and management of this facility by its
17 executive.

18 This leads IEDC to the conclusion
19 that any extension of the license period beyond
20 its normal two-year period could be severely
21 detrimental to the community. Any longer term
22 license period, presumably negating the formal
23 opportunity for public comment and license review,
24 does not, in IEDC's opinion, represent the
25 environmental and socio-economic risks and impacts

1 inherent in the degree of change evident in the
2 near term.

3 Thank you.

4 THE CHAIRPERSON: Thank you.

5 Are there any questions from the
6 Commission Members?

7 Thank you very much for your
8 presentation.

9 We will now take a 15-minute
10 break.

11 Thank you very much.

12 --- Upon recessing at 10:35 a.m.

13 --- Upon resuming at 10:50 a.m.

14 THE CHAIRPERSON: We will now
15 continue the hearing with regards to Ontario Power
16 Generation Inc.: Application for the renewal of
17 the operating licence for the Western Waste
18 Management Facility, formerly known as Radioactive
19 Waste Operations Site 2.

20 The next two submissions,
21 CMD 02-H8.6 and CMD 02-H8.7, were listed on the
22 agenda as oral presentations, however both
23 Mr. Donald and Mr. Sutton have sent their regrets.
24 They will be unable to attend today's hearing and
25 have asked that their submissions will be

1 considered as written submissions.

2 With these comments, we will now
3 move to written submissions received in this
4 matter. Commission Members have received these
5 documents in advance and have had the opportunity
6 to read the comments submitted.

7

8 **02-H8.6**

9 **Written submission from Sandy Donald**

10 THE CHAIRPERSON: The first
11 submission is from Mr. Sandy Donald as outlined in
12 CMD document 02-H8.6.

13 Do Commission Members have any
14 questions or comments with regard to this
15 submission?

16 There are no comments or
17 questions.

18

19 **02-H8.7**

20 **Written submission from Glenn R. Sutton**

21 THE CHAIRPERSON: We will move to
22 the written submission from Mr. Glenn R. Sutton as
23 noted in CMD document 02-H8.7.

24 Are there any comments or
25 questions from Commission Members with regards to

1 this submission?

2

3 **02-H8.8**

4 **Written Submission from Town of Saugeen Shores**

5 THE CHAIRPERSON: I will now move
6 to CMD 02-H8.8, which is a written submission from
7 the Town on Saugeen.

8 Do the Commission Members have any
9 comments on this submission?

10

11 **02-H8.9**

12 **Written submission from the Corporation of the**
13 **Municipality of Arran-Elderslie**

14 THE CHAIRPERSON: The next
15 submission is CMD document 02-H8.9, a submission
16 from the Corporation of the Municipality of
17 Arran-Elderslie.

18 Are there any comments from the
19 Commission Members with regards to this
20 submission?

21

22 **02-H8.10**

23 **Written submission from Great Lakes United**

24 THE CHAIRPERSON: The next written
25 submission is CMD 02-H8.10 from the Great Lakes

1 United.

2 Are there any comments from the
3 Commission Members with regards to this
4 submission?

5

6 **02-H8.11**

7 **Written submission from South Bruce Impact**
8 **Advisory Committee**

9 THE CHAIRPERSON: The next
10 submission is CMD 02-H8.11 from the South Bruce
11 Impact Advisory Committee.

12 Are there any questions or
13 comments from the Commission Members with regards
14 to this written submission?

15 Thank you very much.

16 This now completes the record the
17 public hearing in the matter of the application by
18 Ontario Power Generation Inc. for the renewal of
19 the operating licence for the Western Waste
20 Management Facility, formerly known as the
21 Radioactive Waste Operations Site 2.

22 The Commission will deliberate and
23 will publish its decisions in due course. These
24 decisions will be posted on the CNSC website as
25 well as distributed to the participants.

1

Thank you very much.