

May 22 and 23, 2002

Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held Wednesday, May 22 and Thursday, May 23, 2002, beginning at 1:45 p.m. in the Public Hearing Room, CNSC Offices, 280 Slater Street, Ottawa, Ontario.

Present:

L.J. Keen, Chair

C.R. Barnes

Y.M. Giroux

A.R. Graham

L.J. MacLachlan

M.A. Leblanc, Secretary

I. Gendron, Senior Counsel

C.N. Taylor, Recording Secretary

CNSC staff advisers were J. Blyth, A. Vachon, K. Lafrenière, R. Leblanc, C. Maloney, B. Howden, B. Pearson, S. Cook, I. Grant, P. Dubé and B. Beaudin.

#### Adoption of the Agenda

1. The agenda, CMD 02-M31.A was adopted as presented.

#### Chair and Secretary

2. The President took the Chair and the Secretary of the Commission acted as Secretary of the meeting with C.N. Taylor acting as recording secretary.

#### Constitution

3. With the notice of meeting having been properly given and a quorum of Members being present, the meeting was declared to be properly constituted.
4. Since the meeting of the CNSC held April 18, 2002, Commission Member Documents CMD 02-M29 to CMD 02-M39 had been distributed to Members. These documents are further detailed in Annex A of these minutes.

#### Minutes of the CNSC Meeting Held April 18, 2002

5. The Members requested a minor change to paragraph 30 and Annex C of the draft minutes concerning the Commission's decision on designated officers. The Members amended the draft

minutes of the Commission Meeting held April 18, 2002 to indicate that the name of the CNSC organizational unit referred to in CMD 02-M28 as “Uranium and Contaminated Lands Division” is corrected to “Uranium Mines and Lands Evaluation Division”.

With that change, the Members approved the minutes of the meeting held April 18, 2002.

## **DECISION**

### Significant Development Report

6. There were no significant developments to report for the period of April 11 to May 6, 2002 (Ref. CMD 02-M33).

### Status Report on Power Reactors

7. With reference to CMD 02-M34, staff noted one minor change since the report was issued. Staff noted that the reactors at Ontario Power Generation Inc.’s Pickering B and Darlington sites are now operating at high power.

### Status Report on Ontario Power Generation Pickering NGS-A Return to Service

8. Ontario Power Generation (OPG) presented the first status report on the return-to-service of the four units at Pickering NGS-A. The Commission, in its decision to allow the return to service (dated November 5, 2001), requested that OPG present status reports to the Commission on the project every six months or prior to the restart of each unit.
9. OPG reported that although 28 of the 74 restart prerequisites established by the CNSC have now been met, progress on the project has been significantly slower than planned. OPG expressed its view that despite these delays, there have been no developments that would invalidate the Commission’s reasons for approving the return to service, or the conclusions of the earlier environmental assessment.
10. OPG explained that the delays were largely as a result of a lack of project oversight and control by OPG. The project has proven to be larger and more complex to manage than originally anticipated. Problems arose from a lack of integration and coordination of the activities being carried out by OPG and its hired Design Agent and General Contractor. To solve the problems, OPG explained that OPG management has taken back the overall project management control. As part of this, the project has been subdivided into more

manageable parts, functional project teams have been established around major systems, and quality audits and assessments are being applied systematically to catch problems early.

11. The Members sought CNSC staff's view on the effectiveness of OPG's quality assurance programs in managing the project delays. In response, CNSC staff expressed the view that the quality assurance program has been effective in identifying the root of the problems, but that it could have been more effectively used in the early identification or avoidance of many of the problems.
12. OPG reported that, under the new management approach, it now expects to be able to remove the guaranteed shutdown state from Unit 4 in the fall of 2002, with possible return to service in late 2002 or early 2003. OPG emphasized in its report that it continues to place the importance of safety over the project schedule.
13. In response to questions from the Members on OPG's anticipated acceleration of progress, OPG stated that several tasks are nearing completion and that the up-front engineering, procurement and approvals for several other items are in place.
14. The Members questioned OPG on the reported larger than expected quantities of silt and mussels that had to be removed from the intake structures. In response, OPG stated that the cleaning activity had no adverse effect on Lake Ontario, and that the cleaning schedule would be reviewed in light of the discovery of a new and possibly more prolific species of mussel found in this location.
15. The Members also questioned whether the renewed emphasis by OPG senior management on this project would negatively affect safety at the other operating stations, including at the Bruce NGS. Both OPG and CNSC staff indicated that appropriate measures have been taken to ensure other important programs are not adversely affected by the demands of this project. Staff indicated that it will continue to closely monitor this aspect.
16. When asked by the Members about the earlier decision to leave the fuel in the reactors during the project, OPG acknowledged that this has been a challenge to work around at Unit 4 (and has likely contributed to some of the project delays); however, OPG stated that it remains of the opinion (based on further specific analysis of this issue) that the fuel should remain in the other units. In OPG's opinion, much was learned in the experience on Unit 4 and the cost, time and worker dose consequences of removing the fuel still cannot be justified.

17. With reference to a recent media report on the project delays, the Members pointed out that the public may be receiving the message that the project delays were due to the environmental assessment and new security requirements, as opposed to the project oversight and control problems discussed in OPG's status report. OPG, while acknowledging the Members's comment, noted that the environmental assessment did have an earlier impact on the overall schedule and that security is one factor that has contributed to the recent delays.
18. In response to a summary question from the Members, CNSC staff indicated that it is satisfied that OPG has identified the root of its problems and is making a serious effort to address them. CNSC staff also expressed satisfaction with the quality of the work being completed and that, with the remaining tasks completed, the facility should be in a condition to operate safely.

CNSC Staff Annual Report for 2001 on the Canadian Nuclear Power Industry

19. Staff summarized the contents of the "CNSC Staff Annual Report for 2001 on the Canadian Nuclear Power Industry" (CMD 02-M38 and 02-M38.A).
20. Using the new performance reporting criteria and terminology established previously in CMD 02-M5, staff reported that the industry had generally strong performance in: design adequacy; equipment fitness for service; emergency preparedness; environmental performance; radiation protection, security; and safeguards.
21. Staff noted that there were no serious process failures in 2001, and no exceedances of regulatory requirements for worker or public radiation exposures, or for environmental releases.
22. However, staff observed weaknesses across the industry in the area of performance assurance which has led to unnecessary plant transients. Performance assurance encompasses the various aspects of quality assurance, human factors and training. Staff identified the need for improvements in corporate oversight and implementation in these areas.
23. The Members questioned representatives of the industry on whether they felt the observed problems in performance assurance were rooted in the overall safety culture of the industry. The representatives from Ontario Power Generation (OPG),

Hydro Quebec (HQ), New Brunswick Power (NBP), and Bruce Power (BP) generally agreed that culture is a key issue. The industry representatives generally acknowledged that, in the past, the culture of the nuclear industry was one focused on the more technical and quantifiable engineering performance issues. It was generally observed by the industry representatives that the shift towards the “softer”, less quantifiable human performance issues has required a change in the industry culture, and that this change is still occurring at all levels. The industry representatives generally expressed agreement that the staff report will be useful in continuing to focus management and staff on these important areas.

24. The Members sought a more detailed explanation for the low rating of “C” in Radiation Protection at Gentilly-2. CNSC staff and the representative from HQ explained that the problems relate to higher than necessary exposures of workers when handling tritiated water. HQ noted that it has since changed its procedures and requirements (including proper use of ventilated suits) in accordance with the CNSC staff findings.
25. The Members questioned the industry representatives on whether they found the CNSC staff annual report useful and sought information on how they communicate the information in their respective organizations.
26. The industry representative responses were generally favourable with respect to the new performance rating system and criteria. The new format was generally felt to provide information that is useful and more easily communicated than the previous format. It was noted that the information in the report has also been communicated to senior management and Boards of Directors, as well as to the supervisors and worker responsible in specific areas. It was observed by some industry representatives that the report would be more useful if it contained specific information on what could be done to achieve higher performance ratings. The Members noted that better sources of this type of information would be the facility-specific mid-term reports, and other compliance information from CNSC staff.
27. The Members observed the consistently high performance of the industry in the area of safeguards.
28. The Members, referring to the corrections to the annual report identified in CMD 02-M38.A, and an apparent error in the glossary

(regarding the terms *setback* and *stepback*) requested CNSC staff to reissue a corrected version. In that revision, the Members also recommend that the term “plant transient” be added to the glossary.

**ACTION**

**Status Report on Atomic Energy of Canada Limited: Approval to Restart Commissioning of the Maple 1 and 2 Reactors**

29. With reference to CMD 02-M36, staff provided the Members with the third progress report on the completion of prerequisites for the restart of commissioning at the MAPLE 1 and 2 Reactors. In its earlier decision on this matter dated January 15, 2002, the Commission required status reports on this project at each regularly scheduled Commission meeting until staff had authorized the resumption of the commissioning program.
30. Staff reported that AECL’s progress continues to be generally satisfactory despite recent delays caused by problems with the in-reactor testing of the shutoff rods in MAPLE 1.
31. Staff noted that AECL has now completed the prerequisites for: foreign material exclusion; review of non-conformances; and alignment of the quality assurance programs.
32. The Members questioned staff and AECL on whether any disagreements on issues remain. Staff and AECL responded that no disagreements exist and that further meetings to review issues are planned in the near future.
33. The Members enquired about the status of the most recent incident involving the testing of the shutoff rods in MAPLE 1. Staff responded that the Unplanned Event Report on the subject is expected to be submitted by AECL on May 31, 2002. AECL has indicated that the problem was identified and corrected and that additional testing is planned for the installation in MAPLE 2.
34. Staff will provide a further update status report at the Commission meeting on June 27, 2002.

**ACTION**

**Status Report on Atomic Energy of Canada Limited: Approval to Commence Active Commissioning of the New Processing Facility**

35. With reference to CMD 02-M37, staff provided the Members with the third progress report on the completion of prerequisites for the commencement of active commissioning at the New Processing Facility (NPF) at the Chalk River Laboratories. In its earlier decision on this matter dated January 15, 2002, the Commission

required status reports on this project at each regularly scheduled Commission meeting until staff had authorized the start of the active commissioning program.

36. Staff reported that AECL continues to make satisfactory progress and that prerequisites have now been completed on the review of non-conformances and the alignment of the quality assurance programs.
37. The Members enquired as to why the NRU had to be shutdown before the testing of the active ventilation system at the NPF could proceed. Staff explained that this is because the air filtration systems are shared with the NRU.
38. Staff will provide a further status report on the NPF project at the Commission meeting on June 27.

**ACTION**

**Nuclear Emergency Preparedness and Response in Canada**

39. Annex B to these minutes contains the names of the persons representing the various federal, provincial and industry organizations during the presentation on emergency preparedness and response in Canada and during the subsequent questioning by the Members on this addenda item.
40. With reference to a report (CMD 02-M39), prepared by the staff of CNSC, Health Canada (HC), and the Office of Critical Infrastructure Protection and Emergency Preparedness (OCIPEP), CNSC staff provided an overview of the nuclear emergency preparedness and response arrangements in Canada.
41. CNSC staff also described a three-part project that it has initiated to provide further details to the Commission in about one year. The first part is the overview presentations at this meeting; the second part involves multi-stakeholder workshops to be held in Ontario, Quebec and New Brunswick in the fall of 2002 (to discuss best practices and opportunities for improvement among all stakeholders); and thirdly, there will be a presentation of the workshop results to the Commission in early 2003. Staff noted that the scope of the report and planned workshops and presentation is limited to those emergency arrangements affecting the major Class I nuclear facilities (i.e, the power reactors in Ontario, Quebec and New Brunswick) and AECL's Chalk River Laboratories.
42. CNSC staff explained the general roles and responsibilities of the various responsible authorities for on- and off-site response to

nuclear emergencies at the federal, provincial and municipal government levels, including the “first responders (e.g., fire, police, emergency, medical), and by the facility operators (licensees).

43. With respect to the CNSC role, staff described how it reviews the licensee’s emergency plans as part of licensing process under the *Nuclear Safety and Control Act* (NSCA). In that regard, staff referred to the obligations that the NSCA and Regulations place on licensees and to the related CNSC Regulatory Guide G-225 *Emergency Planning at Class I Nuclear Facility and Uranium Mines and Mills*.
44. Staff noted that the CNSC does not regulate or engage in the detailed review of off-site emergency plans that are the responsibility of other federal and provincial authorities. However, CNSC staff noted the vital importance for the Commission to be satisfied that the off-site emergency arrangements will provide adequate protection of health, safety and the environment in the event of a nuclear emergency at a licensed facility. In that regard, CNSC staff noted its role in the development of proposed *General Guidelines for Off-site Emergency Preparedness and Response* (drafts are currently under consultation). CNSC staff also explained the CNSC’s role in responding to a nuclear emergency in accordance with the *CNSC Emergency Response Plan*.
45. In its presentation, staff further drew the Member’s attention to Canada’s participation in, and responsibilities under, the international conventions on *Assistance in the Case of Nuclear Accident or Nuclear Emergency* (1986), and the *Early Notification of a Nuclear Accident* (1987).
46. Representatives from Health Canada (HC) elaborated on the CNSC staff’s description of HC’s role as the lead federal department under the *Federal Nuclear Emergency Plan* (FNEP). HC explained the statutory and policy bases for the FNEP, as well as the circumstances under which the FNEP is activated.
47. HC explained that during an emergency, HC, through the National Support Centre of the FNEP, coordinates and manages the activities of up to 18 federal departments and agencies, provides the resources and equipment for monitoring and assessing the health risks and impact during an incident, and recommends protective and mitigative measures.
48. HC explained how the management structure and interfaces set out under FNEP link directly with the comparable functional areas in

the provincial organizations. HC noted that the provinces have the primary responsibility for off-site planning and response, including for public protective actions and response. The FNEP provides for coordinated federal assistance when requested by the provinces.

49. As part of its coordination role, HC explained that it chairs and co-chairs multi-departmental advisory committees and a Canada-U.S. Working Group. Those committees and groups assist in the development of guidelines and standards, as well as forming arrangements for alerting, response, mutual assistance, and joint drills.
50. HC also explained how it is responsible for managing liaison with international organizations, such as the International Atomic Energy Agency, and foreign jurisdictions, such as the United States. HC described its role as the Canadian National Competent Authority Abroad.
51. HC expressed the view that the FNEP has proven to be a reliable structure for federal response and outlined a number of recent initiatives and improvements completed and underway.
52. OCIPEP, in its part of the presentation of CMD 02-M39, described how it provides assistance to federal departments, provinces and municipalities in the preparation of emergency plans and capabilities. In particular, OCIPEP assists federal departments in meeting obligations under the *Emergency Preparedness Act*; such as in respect to the identification of civil contingencies, the development of emergency plans, the conduct of training, and the planning and execution of exercises (such as the recent CANATEX-3 / INEX-2 exercise involving a simulated emergency at the Darlington Generating Station).
53. OCIPEP noted that it was involved in the development of the FNEP and the Canada-U.S. Joint Radiological Emergency Response Plans. The OCIPEP headquarters is equipped for, and used as the National Support Centre during an emergency. OCIPEP also operates the Government Emergency Operations Coordination Centre (GEOCC) on a 24/7 basis.
54. In its summary statement, CNSC staff stated that it considers the current arrangements to be generally effective, and that emergency plans and the means for their coordination exists at all levels. Staff noted, however, that opportunities for improvement are available, particularly in the areas of coordination and harmonization between agencies, public communications and notification, and in the

design and implementation of protective strategies. CNSC staff expressed the view that the planned workshops in the fall of 2002 will provide a good opportunity to discuss best practices in these and other areas, and to identify areas for further improvements in a collaborative manner.

55. The Members questioned how the many plans and key contact lists at the various jurisdictional and regional levels are kept up-to-date. In response, HC and CNSC staff explained that, although HC maintains an up-to-date database of contact names and liaison officers at the primary level, there is no formal mechanism to systematically inform and update all parties at all levels. Staff indicated that the need for a higher degree of organization may be a topic for further discussion at the planned workshops.
56. The Members enquired as to how HC and OCIPEP are helping keep the many organizations focused and coordinated. In response, OCIPEP highlighted its role in working with the emergency preparedness and response community at all levels. As examples, OCIPEP identified its emergency preparedness training school in Arnprior, the assistance it provides in emergency planning and exercises, and the work it is doing to foster partnerships, including with non-government organizations, private sector and international bodies. OCIPEP also noted its ongoing efforts to help firm up agreements with other agencies on roles and responsibilities.
57. In response to the same question about coordination of responsible parties, HC stated that it helps maintain a sharp focus among the parties by keeping the FNEP continuously active and evolving. It also continually exercises the plan and actively follows up on opportunities identified by those exercises. HC also tries to build on the initiatives of others to keep the agenda moving forward (such as from the CNSC and the Chemical, Biological, Radiological and Nuclear Research Technology Initiative (CRTI)).
58. In a follow-up question on the matter of interdepartmental coordination, the Members sought assurances from the federal and provincial representatives that the roles and responsibilities among the various authorities are clear and unambiguous. In response, the various federal and provincial representatives at the meeting generally concurred that the emergency plans contain clear and consistent descriptions of the roles and responsibilities. HC noted that what needs to be addressed is a better standardization among the participants of the field procedures and methods to be used, such as in radiation sampling and monitoring methods. The

representative from Quebec also pointed to issues related to equipment acquisition and sharing, training, and the means of getting the responsible people to the appointed response centres in a timely manner.

59. The Members asked about the state of readiness for other types of nuclear emergencies in other regions in Canada, such as for transportation accidents. The provincial representatives at the meeting (i.e., for Ontario, New Brunswick and Quebec) noted that the response instructions for the local police and fire services are generally well set out in the provincial emergency plans and related standard operating procedures. The first responders are also aware of the availability of federal assistance, such as, for example, by contacting the CNSC Duty Officer and accessing Transport Canada's Transport of Dangerous Goods Information Centre. These services are available 24/7 and could also lead to activation of the FNEP. It was also pointed out that under the *Transportation of Dangerous Goods Act*, consignors of hazardous materials are required to have relevant emergency response information available. CNSC staff and OCIPEP further identified the relevant training that is available for first responders -- which is to increase under the CRTI program.
60. The Members, noting that the FNEP does not apply to acts under declared war, questioned if FNEP would apply in an undeclared act of terrorism. In response, HC assured the Members that the FNEP provides for an all-hazards, all-location response, regardless of the initial cause.
61. The Members noted the importance of having effective public notification and information dissemination during an emergency and questioned how the media, in particular, is used in that capacity. HC stated that, under the FNEP and National Support Centre, interdepartmental information would be channeled to the identified media through a public affairs organization led by HC. The affected province may also form a joint (all jurisdiction) information centre having a coordinated information strategy. Ontario and Quebec representatives noted that they have regional Joint Information Centres, and standing arrangements to contact pre-designated local media with prepared messages. The local media are also periodically briefed on the communications strategies that will be used in the event of an emergency.

62. On the question of public alert notification, the provincial representatives referred to the increasing use of automated alert systems that use telephone, or other devices installed in local homes and businesses. The New Brunswick representative noted that a long-standing warden system still exists in the province, and that it will be maintained for back-up public notification to the automated systems.
63. Further on the subject of public information, the Members enquired about how the public is being informed and educated about the various emergency preparedness and response plans, and how they should be preparing themselves. The federal and provincial government representatives generally concurred with the importance of maintaining good public awareness of the emergency plans and, in particular, about the importance of informing the public about the actual risks posed by nuclear accidents and the appropriate protective measures to be taken. The Members were informed during the meeting about the various communication methods and information fora used at the federal and provincial levels. It was generally recommended that the objective statement of "*be prepared, not scared*" is a theme that should be promoted and continually acted upon in the various communication and public education strategies. The federal, provincial and industry representatives also expressed general agreement that public awareness is an essential part of an effective emergency response plan.
64. The Members solicited information from all of the various federal, provincial and industry representatives at the meeting about whether their emergency plans contain adequate contingencies. In terms of the federal plans, HC and OCIPEP stated that the FNEP contains several contingencies for backup personnel, communication methods and other equipment. An important aspect of this at all jurisdictions involves the need for alternative communication methods in the event the primary systems are overloaded or knocked out during an emergency. In that regard, various examples of contingencies were described. For example: arrangements with telephone companies for priority access to systems; alternative systems such as cellular, satellite and radio communications; use of hand written messages and procedures; and the use of community wardens to ensure people get the information they need. The industry representatives also expressed the general view that having robust contingency structures in their emergency plans is common to most other aspects of their operational planning and design activities (e.g., by identifying and correcting common-mode failure risks).

65. The Members asked staff and the other contributors to the meeting to summarize what they consider to be the main weaknesses in the current nuclear emergency preparedness and response systems in Canada.
66. CNSC staff expressed the view that improvements are generally needed in three areas: coordination between agencies, including systematic, multi-agency reviews of exercise results; public communications; and protective action strategies (such as in population evacuation and distribution of stable iodine tablets).
67. HC noted, as examples, the need to improve the ready availability of aerial radiation surveillance services, as well as the need to improve the readiness of hospitals (other than those near the major nuclear facilities which are well equipped) to deal with radiation health effects.
68. As examples of improvements needed, OCIPEP identified its current examination of a possible backup response centre located outside the core area of Ottawa, as well as the possible establishment of joint emergency operations facility in each province.
69. The Ontario Government representative concurred with the staff points above and raised the issue of needing to be continuously vigilant against the tendency to become complacent, particularly where competing priorities for resources are involved. The events of September 11, 2001, unlike other past events, appear to have resulted in a more sustained and collaborative effort on the subject of emergency preparedness.
70. The representative from the Province of Quebec pointed to the need for continued improvements in coordination, both internally and externally with the provincial government and that much progress has been recently made in this regard. With reference to Quebec's emergency plans in development, further improvements will be made in the areas of acquisition and sharing of equipment, procedures and technical expertise. In general, the Quebec representative expressed the view that the effective arrangements now in place for the Gentilly site need to be expanded as appropriate to other areas of the province.
71. As examples of challenges in the Province of New Brunswick, the provincial representative also pointed to the need to compete

effectively for the necessary resources. As well, the New Brunswick representative identified the need to keep the training of key personnel up-to-date.

72. As an industry view point, the representative from NB Power felt there was still a need to ensure clarity in the roles and responsibilities of the various authorities so to avoid any unnecessary duplication or gaps in the delivery of important components of the response system.
73. Before closing the meeting, the President thanked the staff and other federal departments who prepared the overview report and formal presentations. As well the President thanked the other representatives of the federal and provincial government departments and nuclear facility operators for their willing and active participation during the question period.
74. The President requested that the concerns and questions of the Members (as summarized in the foregoing paragraphs) be further discussed in the planned multi-jurisdictional workshops, and that further information on those and any other topics be brought back to the Commission for information early next year. In particular, the President pointed to the need to address inter-agency coordination and communications, public information and alert systems, training, and ways in which the Commission can exercise its authority to help improve the overall system.
75. The President noted that there was no direct input from the municipal and first responder levels during the meeting and that this will be an important area to consult during the planned workshops.
76. The President stated that the Commission remains vitally interested in the subject of nuclear emergency preparedness and response and expects to see continued and significant progress in this area.

**ACTION**

**Closing of Public Meeting**

77. The public portion of the meeting closed at 11:54 a.m. May 23, 2002 and the meeting continued in-camera.

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*Chair*

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*Recording Secretary*

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*Secretary*

ANNEX A

CMD	DATE	File No
02-M29	2002-04-16	(1-3-1-5)
Notice of Public Meeting - May 22, 2002		
02-M30	2002-04-25	(1-3-1-5)
Notice of Meeting - May 23, 2002		
02-M31	2002-05-08	(1-3-1-5)
Agenda of the meeting of the Canadian Nuclear Safety Commission to be held in the Public Hearing Room, 14th floor, 280 Slater Street, Ottawa, Ontario, on Wednesday May 22 and Thursday May 23, 2002. The meeting will begin after the closing of the Public Hearings which are scheduled for May 22.		
02-M31.A	2002-05-16	(1-3-1-5)
Update - Agenda of the meeting of the Canadian Nuclear Safety Commission to be held in the Public Hearing Room, 14th floor, 280 Slater Street, Ottawa, Ontario, on Wednesday May 22 and Thursday May 23, 2002. The meeting will begin after the closing of the Public Hearings which are scheduled for May 22.		
02-M32	2002-05-07	(1-3-1-5)
Minutes of the Meeting of the Canadian Nuclear Safety Commission held April 18, 2002		
02-M33	2002-05-06	(1-3-1-5)
Significant Development Report no. 2002-4		
02-M34	2002-05-06	(1-3-1-5)
Status Report on Power Reactors		
02-M35	2002-05-08	(1-3-1-7)
Pickering NGS-A Return to Service		
02-M36	2002-05-06	(26-1-62-0-0)
Approval to Restart Commissioning of the MAPLE 1 and 2 Reactors		
02-M37	2002-05-06	(24-1-3-0)
Approval to Commence Active Commissioning of the New Processing Facility		
02-M38	2002-05-06	(26-1-0-0-0)
CNSC Staff Annual Report for 2001 on the Canadian Nuclear Power Industry		

02-M38.A 2002-05-15 (26-1-0-0-0)

CNSC Staff Annual Report for 2001 on the Canadian Nuclear Power Industry - Supplementary Information

02-M39 2002-05-06 (1-14-0, 1-14-2)

Nuclear Emergency Preparedness and Response in Canada

**ANNEX B**

**Canadian Nuclear Safety Commission**

**May 23, 2002  
MEETING**

CNSC Staff:

- I. Grant, Director General, Directorate of Assessment and Analysis.
- P. Dubé, Director, Security & Emergency Response Division
- B. Beaudin, Emergency Preparedness Officer, Security and Emergency Response Division

Health Canada:

- Dr. J. Cornett, Director, Radiation Protection Bureau
- J.-P. Auclair, Head, Nuclear Emergency Preparedness

Transport Canada:

- J.-P. Boulay, Director, Emergency Preparedness

Office of Critical Infrastructure Protection and Emergency Preparedness (OCIEP):

- J. Ekholm, Director of Plans & Readiness
- B. Conn, Manager, Readiness Division

New Brunswick Emergency Measures Organization:

- A. Skaling, Director

Emergency Measures Ontario:

- N. McKerrell, Chief, Office of the Solicitor General

Ministère de la Sécurité publique du Québec :

- B. Dubois, Directeur des opérations territoriales de la sécurité civile

Centrale nucléaire Gentilly-2 :

- M. Rhéaume, chef, sûreté nucléaire et permis

New Brunswick Power Corporation:

- B. Shanks, Emergency Planning Supervisor, Point Lepreau Generating Station

Bruce Power:

- F. Saunders, Vice-President of Safety and Environment

Ontario Power Generation:

- R. Clarke, Director of Emergency and Fire Services