



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Summary of Proposed Follow-Up and Monitoring Program

Pickering NGS-A Return to Service
Environmental Assessment



SUMMARY OF PROPOSED FOLLOW-UP AND MONITORING PROGRAM

PICKERING NGS-A RETURN TO SERVICE ENVIRONMENTAL ASSESSMENT

The Canadian Nuclear Safety Commission (CNSC) is inviting public input on the design of the follow-up and monitoring program for the environmental assessment recently completed on the proposed return-to-service of the Pickering Nuclear Generating Station 'A'. Please provide your comments to the address below prior to May 25, 2001.

1.01 INTRODUCTION

On February 16, 2001, following a public hearing in October and December of 2000, the CNSC announced its decision on the environmental assessment of Ontario Power Generation's proposal to return the Pickering Nuclear Generating Station 'A' (NGS-A) to service. The environmental assessment was conducted in accordance with the *Canadian Environmental Assessment Act* (CEAA). The Commission decided that the proposed return to service of Pickering NGS-A is not likely to cause significant adverse environmental effects, taking the proposed mitigation measures into account. Having made that decision, the CNSC is now able to proceed with the consideration of Ontario Power Generation's licence application under the *Nuclear Safety and Control Act*. The CNSC will not allow the Pickering NGS-A to return to service until it is satisfied that the measures necessary to protect people and the environment are in place.

As part of its decision on the environmental assessment, the CNSC identified a follow-up and monitoring program that would be required if the Commission approves the return to service. The purpose of the follow-up and monitoring program is two-fold:

- to assist in determining if the environmental effects of the project are as predicted in the environmental assessment; and
- to confirm if the proposed impact mitigation measures are effective.

The Commission also committed to further developing the follow-up and monitoring program in consultation with the community and other stakeholders. The purpose of this document is to provide the public and other stakeholders additional information on the scope of the proposed follow-up and monitoring program, and to invite comments and suggestions on its final design. Directions on where to obtain more detailed information on the proposed program, and where to submit comments, are also provided.

If the licence application is approved and the project proceeds, the follow-up program will be a requirement of the license and the results of the follow-up program will be made available to the public.

2.0 PROPOSED PHASES AND SCHEDULE FOR FOLLOW-UP AND MONITORING PROGRAM IMPLEMENTATION

Two phases of follow-up studies and monitoring are proposed:

- Pre-Restart Phase; and
- Post-Restart Phase.

The studies and monitoring activities in the Pre-Restart Phase are intended to supplement or confirm the baseline information used to conduct the environmental assessment. The Pre-Restart Phase is intended to improve the basis for subsequent comparison with the results of the follow-up and monitoring activities that would be carried out in the proposed Post-Restart Phase. CNSC staff have approved some aspects of the Pre-Restart Phase being initiated now, to ensure important spring season baseline information is captured.

The Post-Restart Phase would be initiated if the facility is returned to service. The studies and monitoring activities will provide environmental information which, when compared to the Pre-Restart baseline information, will permit the identification of any actual effects attributable to facility operation. This will provide a basis for determining: the validity of the predictions made during the environmental assessment; the effectiveness of the mitigation measures being implemented; and whether any additional or new mitigation measures are required.

3.0 PROPOSED SCOPE OF THE FOLLOW-UP AND MONITORING PROGRAM

The follow-up and monitoring program will be designed to identify the specific effects of the project, and the effects of the project in combination with other projects and activities in the area (cumulative effects). The follow-up and monitoring program will focus on the effects identified in the environmental assessment, and allow for the detection of any unanticipated effects. The program will be designed to permit the evaluation of the effects over specific periods of time. This will allow for reporting at regular intervals and ensure that any necessary corrective actions are taken in a timely manner. The program will be integrated with the other components of the Pickering NGS site-wide environmental monitoring programs, thus ensuring that the results of all other relevant environmental studies will be taken into account. The follow-up program, like the environmental assessment on which it is based, will be designed with the flexibility to address the effects of both normal operations and those from any malfunction and accident events.

The following table outlines the major elements of the proposed follow-up program.

ENVIRONMENTAL ASSESSMENT COMPONENT	EFFECTS TO BE MANAGED	PRE-RESTART	POST-RESTART
Radiation & Radioactivity	General Public (Individual Doses)	✓	✓
Atmospheric Environment	Air Quality (Steam and Feed Water System)	✓	✓

Hydrology & Water Quality	Lake Water Quality (Malfunctions and Accidents)	✓	✓
	Lake Water Quality (Operation of MWSS and RLWMS)	✓	✓
	Near-Shore Flow Circulation (Operation of CCW System)	✓	✓
	Water Temperature (Operation of CCW and MWSS)	✓	✓
	Sedimentation (Operation of CCW System)	✓	✓
	Surface Water Runoff Quality (Site Drainage)	✓	✓
Aquatic Environment	Aquatic Habitat and Aquatic Biota (Impingement)	✓	✓
	Aquatic Habitat and Aquatic Biota (Entrainment)	✓	✓
	Aquatic Habitat and Aquatic Biota (Temperature and Velocity)	✓	✓
	Aquatic Habitat and Aquatic Biota (Fishing Pressure)	✓	✓
Terrestrial Environment	Wildlife Communities (Land Transportation Activities)		✓
Geology, Hydrogeology & Seismicity	Groundwater Quality (General)	✓	✓
	Groundwater Quality (Malfunctions and Accidents – Tritium)	✓	✓
	Physical Environment (Seismic Events)	✓	✓
Land Resources	Transportation and Network Elements (Level of Service – Hwy 401)		✓
	Transportation and Network Elements (Level of Service – Bayly St.)		✓
Socio-Economic Conditions	Residents and Communities (Satisfaction with Community)		✓
	Community Infrastructure (Housing and Property Values)	✓	✓
Emergency Response Plan & Preparedness	Dose to Humans & Non-Human Biota		✓

MWSS: Miscellaneous Water Supply Systems
 RLWMS: Radioactive Liquid Waste Management System
 CCW: Condenser Cooling Water System

4.0 OPPORTUNITY FOR REVIEW BY PUBLIC AND OTHER STAKEHOLDERS

The CNSC is providing the public and other stakeholders with an opportunity to review and comment on the scope of the proposed follow-up and monitoring program. This opportunity is being provided to the general public and to the following key stakeholders and interested parties:

- All public groups or individuals who participated in the environmental assessment hearings conducted by the CNSC, as well as specific community groups such as the Community Advisory Council and the Pickering Naturalist Club;
- Local governments and related organisations, including the City of Pickering, the Town of Ajax, and the Durham Region Medical Officer of Health / Durham Nuclear Health Committee;
- Ontario Ministries, including the Ministry of the Environment, Ministry of Natural Resources, Ministry of Energy, Science and Technology, and Ministry of the Solicitor General; and
- Federal Authorities (FAs) that participated in earlier stages of the environmental assessment, including Environment Canada, Fisheries and Oceans Canada, Health Canada and Natural Resources Canada.

All interested parties are invited to provide comments to the CNSC prior to **May 25, 2001**.

5.0 WHERE TO OBTAIN MORE DETAILED INFORMATION AND ADDRESS COMMENTS

More detailed information on the proposed follow-up and monitoring program, including a description of the program framework and fact-sheets for each program element, are available at the following locations:

PICKERING

Central Library	1 The Esplanade Pickering, Ontario L1V 2R6	905-831-6265
Claremont Branch	4941 Old Brock Road Claremont, Ontario L1Y 1B1	905-649-3341
Greenwood Branch	3540 Westney Road Greenwood, Ontario L1S 4S7	905-683-8844
Petticoat Creek Library	470 Kingston Road, Pickering, Ontario	905- 420-2254
Whitevale Branch	475 Whitevale Road Whitevale, Ontario L1X 2R5	905-294-0967
Pickering Nuclear Information Centre	Pickering, Ontario L1V 2R5	905-837-7272

AJAX

McLean Public Library	95 McGill Drive Ajax, Ontario L1T 3K7	905-428-8489
-----------------------	---	--------------

Village Branch Public Library	58 Church Street Ajax, Ontario L1T 2W6	905-683-1140
-------------------------------	--	--------------

Main Branch Public Library	65 Harwood Ave. Ajax, Ontario L1S 2H8	905-683-4000
----------------------------	---	--------------

SCARBOROUGH

Port Union Library	5450 Lawrence Ave. East Scarborough, Ontario M1C 3B2	416-396-8885
--------------------	--	--------------

Morningside Public Library	255 Morningside Ave. Scarborough, Ontario M1E 3E6	416-396-8881
----------------------------	---	--------------

Highland Creek Library	3550 Ellesmere Rd. Scarborough, Ontario M1C 3Z2	416-396-8876
------------------------	---	--------------

For further information and copies of the framework document and fact sheets you may contact:

Mr. Chris Taylor,
Program Specialist
Canadian Nuclear Safety Commission
P.O. Box 1046, Station B
280 Slater Street
Ottawa, Ontario, K1P 5S9
Tel: (613) 947-3209
Fax: (613) 995-5086
Email: ceaainfo@cnsccsn.gc.ca

Please also submit your comments on the scope of the proposed follow-up and monitoring program to the above CNSC contact.