

NEW BRUNSWICK POWER NUCLEAR –
CANADIAN NUCLEAR SAFETY
COMMISSION PROTOCOL FOR A
SATISFACTORY RATING IN THE
EMERGENCY MANAGEMENT AND
FIRE PROTECTION SAFETY AND
CONTROL AREA

August 2011
Revision 0

Canadian Nuclear Safety Commission
Protocol

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This protocol is effective on the date of signature

BETWEEN

New Brunswick Power Nuclear Corporation
(referred to in the Protocol as “NBPN”)

AND

Canadian Nuclear Safety Commission
(referred to in the Protocol as “CNSC”)
280 Slater Street
P.O. Box 1046, Station “B”
Ottawa, Ontario
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1 Understanding

Compliance and safety performance in Emergency Management and Fire Protection Safety and Control Area (SCA) decreased to “Below Expectations” in the 2010 Nuclear Power Plant (NPP) industry report for Point Lepreau Nuclear Generating Station (PLNGS). The annual NPP report summarizes the Canadian Nuclear Safety Commission (CNSC) staff’s assessment of the Canadian nuclear power industry’s safety performance during 2010 and details the progress of compliance and regulatory issues up to April of 2011. Deficiencies noted to in-plant emergency response, primarily for fire, outweighed good performance in the implementation of planned fire protection design modifications for this SCA.

The 2010 NPP report states that CNSC staff consider a “Satisfactory” rating for Emergency Management and Fire Protection SCA a prerequisite of return to service of the reactor, which is considered to be prior to releasing the Guaranteed Shutdown State (GSS).

This protocol specifies the key activities to be undertaken for NBPN to demonstrate the acceptability of their fire protection program and to achieve a “Satisfactory” rating in Emergency Management and Fire Protection SCA.

The scope of work specified in this protocol has been agreed to with CNSC staff for return to service of the reactor as well as other licensing considerations. The schedule and scope of regulatory submissions is specified in Appendices B and C as well as the nature of CNSC review required. Regulatory acceptance is dependent on the deliverables meeting the established closure criteria. CNSC staff will review and accept the deliverables in accordance with the agreed upon

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schedule subject to those deliverables meeting closure criteria. The schedule is subject to change based on operational considerations.

The following documents and any amendments relating thereto, which will be dealt with through formal correspondence between designated representatives, form the agreement between NBPN and the CNSC:

1. Article 1 to Article 5, inclusive;
2. Appendix A - Technical Scope & Regulatory Response;
3. Appendix B – Timelines;
4. Appendix C - Schedule of Key Deliverable Submissions, and
5. Appendix D - Issue Resolution Process.

This protocol details the administrative process to be used between the CNSC and NBPN to manage regulatory interaction. It will follow existing regulatory requirements without compromising the CNSC's independence and ability to enforce the *Nuclear Safety and Control Act* (NSCA) and the associated applicable regulations. It specifically applies to timely completion of the key work to allow licensing submissions and decisions as outlined in Appendices B and C. This protocol addresses five key items to facilitate schedule adherence for all participants as follows:

1. Progress of activities to a specific schedule;
2. Use of a defined process to resolve issues;
3. Identification of points of contact for communication;
4. Guiding principles for the regulatory review of work; and
5. Controlling changes to the agreed protocol.

2 Date of Completion of Activities and Description of Activities

- 2.1 Subject to this protocol, NBPN and CNSC staff shall perform and complete the activities that are described in Appendices A, B, and C within the timeframes indicated. The ability of CNSC staff to complete the reviews within the allocated time is dependent on the quality of the deliverables submitted by NBPN.
- 2.2 Changes to the schedule for key deliverables in Appendix C will be managed by formal correspondence in accordance with the CNSC Protocol Governing Correspondence between the CNSC Power Reactor Regulatory Program staff and Power Reactor licensees, Rev. 3.1.
- 2.3 Any disputes shall be resolved at the working level or by escalation per Appendix D.

3 Guiding Principles for Regulatory Review

The following guiding principles will be followed for NBPN to demonstrate the acceptability of their ERT performance and to achieve a “Satisfactory” rating in Emergency Management and Fire Protection.

- 3.1 This protocol applies from the date of signature and ends when CNSC staff has issued its final statement on the acceptability of the work. This is to establish regulatory scope and predictability to allow for planning and scheduling as per NBPN governance and CNSC requirements.
- 3.2 The key deliverables are to be completed and submitted by NBPN in time for CNSC staff to complete their reviews and issue a final statement on the acceptability of the work as per the schedule defined in Appendix C.
- 3.3 Written confirmation from CNSC staff on the acceptability of the work and indicating a “Satisfactory” rating in Emergency Management and Fire Protection has been achieved is a prerequisite to NBPN proceeding to lift the GSS.
- 3.4 The work will take into consideration any new requirements related to improvements in public, worker, and environmental safety.
- 3.5 All formal commitments made will be tracked to minimize the risk of being overlooked and to ensure timely completion.

4 Fees for Regulatory Effort

CNSC cost recovery for this regulatory effort shall be through licence fees that will accord with the CNSC Cost Recovery Fees Regulations. All efforts by CNSC staff in reviewing submitted material and any extra effort and priority assigned to the project necessary to maintain the schedule will be presented as extra costs assigned as a special project in the cost recovery fees collection process and will be identified separately.

5 Representatives

- 5.1 The representatives are responsible for all matters concerning the activities under this protocol. Any proposed changes to the scope of the activities are to be discussed and authorized by means of formal correspondence.
- 5.2 For the purposes of this protocol, the CNSC shall be represented by the following representatives:
 - (i) The Director General, Directorate of Power Reactor Regulation (position currently held by Dr. G. Rzentkowski), for general matters related to this Protocol
 - (ii) The Director, Point Lepreau Regulatory Division (position currently held by Ms. L. Love-Tedjoutomo), for matters related to the Technical Scope and Schedule

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5.3 For the purposes of the Protocol, NBPN shall be represented by the following representatives:

- (i) The Station Director, Point Lepreau Generating Station (position currently held by Mr. W. Parker), for general matters related to this Protocol
- (ii) The Health, Safety and Environment Manager, Point Lepreau Generating Station (position currently held by Mr. W. Woodworth), for matters related to the Technical Scope and Schedule

Any participant hereto may, by formal correspondence, change any of its appointees mentioned above.

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This Protocol has been executed on behalf of New Brunswick Power Nuclear Corporation and the Canadian Nuclear Safety Commission by their duly authorized representatives:

For New Brunswick Power Nuclear Corporation

For CNSC

Signature:

Signature:

Blair Kennedy

B. Kennedy
Vice President
Generation (Nuclear and Conventional)
New Brunswick Power Corporation

[Signature]

R. Jammal
Executive Vice-President and
Chief Regulatory Operations Officer
Canadian Nuclear Safety Commission

10 August 2011

Date:

2011/08/10

Date:

Appendix A - Technical Scope and Regulatory Response

Technical Scope

NBPN will focus its improvement efforts on emergency response.

ERT Performance

NBPN will demonstrate the effectiveness of the ERT performance through additional training and drills, documented by self-assessments/evaluations, and audits by CNSC staff. A final report will be issued summarizing the training and drill results and confirming that ERT performance meets requirements.

Practice Drills

NBPN will be conducting practice fire drills for its ERT. The drills will be conducted on shift by the duty crew, inside the protected area. These drills will not be formally evaluated, as they are intended to enhance training to address proficiency, safety, and response times. Personnel from the Emergency Preparedness group will be providing feedback to the crews during the practice drills. Management observation of the practice drills will be performed. The drills will be performed in two phases, to allow for different scenarios to be used.

Regular Drills

NBPN will be conducting fall Emergency Response Team drills in three sessions. Each session will include classroom training, field refresher training, and evaluated drills. These drills will be evaluated by an Evaluation Team with the knowledge and experience required to conduct an effective evaluation. Session 1 will be Medical drills. Session 2 will include Fire and Radiation drills. Session 3 will include Chemical drills. The planned dates are included in Appendix B. The Session 2 fire training incorporates live fire drills at the PLGS fire training grounds, as well as in-plant drills.

Regulatory Response

CNSC staff will perform a technical assessment of NBPN deliverables (per Appendix C) and will provide its findings to NBPN for disposition or resolution. CNSC staff will identify any issues for clarification and where additional information is required.

CNSC staff will audit NBPN drills as noted in Appendix B. The scope of the audit will be communicated to NBPN at least 2 weeks prior to the drill.

Technical progress discussions will take place on a periodic basis between NBPN and CNSC staff, as well as review of documents formally submitted listed in Appendix C.

Resolution of issues will be in accordance with the process in Appendix D.

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CNSC staff assessments may form the basis for necessary information that may be used in part, by the Commission, on making restart and licensing decisions.

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Appendix B - Timelines

Actions: ERT Performance	Dates	CNSC Action
Complete Self-Assessed Practice Drills in Protected Area (Phase 1) <ul style="list-style-type: none"> • all 6 crews, response to fire • feedback by NBNP Emergency Preparedness and Environment (EP&E) group 	July 10, 2011 July 17, 2011 July 24, 2011 July 31, 2011 Aug 7, 2011 Aug 14, 2011	
Complete review of Phase 1 Results and prepare Phase 2 Self-Assessed Practice Drills <ul style="list-style-type: none"> • internal review to determine focus areas for Phase 2 • OPG to support 	Aug 16, 2011	Review Phase 1 results
Prepare Drill Scenarios for Fall session (Action notice AN1 – Conduct realistic & representative drills) <ul style="list-style-type: none"> • conduct ERT drills within protected area • ensure ERT can respond to complications related to realistic scenarios performed within protected area. 	Aug 8, 2011 (Session 1) Sept 26, 2011 (Session 2) Nov 16, 2011 (Session 3)	
Complete Self-Assessed Practice Drills in Protected Area (Phase 2) <ul style="list-style-type: none"> • all 6 crews, response to fire • feedback by NBNP Emergency Preparedness and Environment (EP&E) group 	Aug 21 to Oct 6, 2011	Review Phase 2 results
Complete Regular Fall Drills Session 1 (Medical) <ul style="list-style-type: none"> • all 6 crews • evaluated medical drills <p>Note: Significant performance issues identified during the drills will be brought to the attention of management.</p>	Aug 10 (D) Aug 17 (F) Aug 24 (A) Aug 31 (E) Sept 8 (C) Sept 14 (B) 2011	Audit drills*
Complete Regular Fall Drills Session 2 (Fire, Radiation) <ul style="list-style-type: none"> • all 6 crews • fire training, evaluated fire drills • evaluated radiation drills <p>Note: Significant performance issues identified during the drills will be brought to the attention of management.</p>	Sept 28,30 (F) Oct 5, 7 (A) Oct 13, 14 (E) Oct 19, 21 (C) Oct 26, 28 (B) Nov 2, 4 (D) 2011	Audit drills*
Complete Regular Fall Drills Session 3 (Chemical) <ul style="list-style-type: none"> • all 6 crews • evaluated chemical drills <p>Note: Significant performance issues identified during the drills will be brought to the attention of management.</p>	Nov 16 (A) Nov 23 (E) Nov 30 (C) Dec 7 (B) Dec 14 (D) Dec 21 (F) 2011	Audit drills*

*CNSC audits will be variable in scope. NBNP will be informed of the scope of the audit two weeks prior to the drill. Dates for CNSC staff observation of practice drills, and inspections / observations of evaluated drills, are tentative.

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Appendix C - Schedule of Key Deliverable Submissions

Deliverable	Submitted to CNSC	CNSC Response
Self Assessed Practice Drill Results (Phase 1 -ends Aug.14)	Sept 9, 2011	Oct 31, 2011
Self Assessed Practice Drill Results (Phase 2 -ends Sept 25)	Oct 14, 2011	Nov 30, 2011
Regular drill evaluation reports (Information reports will be completed 2 months after completion of drill series):		
Medical	Nov 14, 2011	Jan 14, 2012
Fire	Jan 2, 2012	Mar 2, 2012
Radiation	Jan 4, 2012	Mar 2, 2012
Chemical	Feb 21, 2012	Mar 31, 2012
Final Report on ERT Performance (may include above reports on practice drills, regular drills, and remedial training)	30 days prior to GSS Removal	30 days after receipt

Appendix D – Issue Resolution Process

CNSC staff will review the deliverables prepared by NBPN to determine whether there are fundamental issues to issuing a positive CNSC staff position. Disagreements may arise during the review. A review and issue resolution mechanism will be used to facilitate timely completion.

Nothing in this issue resolution process seeks to bind, or has the effect of binding, the Commission.

Step 1: Identification of the Issue and Resolution at the Working Level

1. Periodic NBPN and CNSC technical review meetings will be held to review progress on the key activities and highlight any potential major issues. Minimum attendance at these review meetings will be the CNSC technical lead and the corresponding point of contact for NBPN.
2. It is the intention of both parties to resolve issues at this level.
3. If an issue cannot be resolved at this level, it will be documented (typically, a brief factual summary of the issue and a paragraph representing the view of each organization) by the individuals in Paragraph 1 within two weeks of failure to resolve, and forwarded to the CNSC Director Level for resolution (Step 2).

Step 2: Resolution at the CNSC Director Level

1. A Step 1 issue, once documented, will be provided to the CNSC Director of the Point Lepreau Regulatory Program Division, and his/her counterparts at NBPN. A meeting will be called, normally within 30 days, to resolve the issue, and the resolution documented.
2. Issues which cannot be resolved at this level will be referred to the Senior Management Level (Step 3) within two weeks, supported by the original or revised documentation from Step 1.

Step 3: Resolution at the Senior Management Level

1. A Step 2 issue, once documented, will be provided to the CNSC Director General, Directorate of Power Reactor Regulation and his/her counterparts at NBPN. A meeting will be called, normally within 30 days, to resolve the issue, and the resolution documented.
2. Issues which cannot be resolved at this level will be referred to the Executive Level within two weeks, supported by the original or revised documentation from Step 2.

Step 4: Resolution at the Executive Level

A Step 3 issue, with documentation, will be sent to the Executive Vice-President and Chief Regulatory Operations Officer (CNSC) and his/her counterparts at NBPN. A meeting will be called, normally within 30 days, to resolve the issue, and the resolution documented.