

PROTOCOL FOR THE RENEWAL OF THE GENTILLY-2 NUCLEAR POWER REACTOR AND RADIOACTIVE WASTE FACILITY OPERATING LICENCES

DATE: 2010-10-05

VERSION: 1

HYDRO-QUÉBEC

**CANADIAN NUCLEAR
SAFETY COMMISSION**

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Summary of Changes

Section	Change
i	Initial version/draft
ii	Draft containing comments by CNSC and Hydro-Québec staff
1	Initial version for approval (with implementation plan to October 8)

Extent of the Protocol

This protocol is essentially administrative in nature. None of the statements in this protocol is to be construed or interpreted as affecting the jurisdiction or discretionary powers of the Canadian Nuclear Safety Commission (CNSC) in its assessments of licence applications made in accordance with the *Nuclear Safety and Control Act* (NSCA) (1). It is not intended to constitute a deviation to the current operating licences of Gentilly-2 for its nuclear power reactor and radioactive waste facility.

1. Objective

The objective of this protocol is to provide a framework within which Hydro-Québec and CNSC staff will work to prepare the necessary information for the Commission to assess Gentilly-2's application to renew its operating licences for the nuclear power reactor and radioactive waste facility and integrate them into a single licence.

2. Introduction

The legal framework for licence renewal is derived from the *Nuclear Safety and Control Act* (NSCA) [1] and supporting Regulations.

Hydro-Québec and CNSC staff will coordinate their efforts for the application to renew the Gentilly2 combined operating licence in order to ensure that the mandates and responsibilities of both organizations are fulfilled.

In engaging in this coordinated effort and working responsibly in the public interest, the CNSC maintains its independence as the Canadian nuclear regulator and Hydro-Québec continues to be solely responsible for the safe operation of the Gentilly-2 reactor.

It is understood that:

- safety will not be compromised in making licensing recommendations to the Commission; and
- the objective is to produce a comprehensive body of information and recommendations to allow the Commission to render its decision regarding the application for a licence renewal.

This protocol sets out the framework within which both organizations will work and establishes a high-level estimate of the time line.

3. Approach to Licensing

To fully address the responsibilities for safety, and to serve the Canadian public, both the CNSC and Hydro-Québec recognize the importance of a well-planned and coordinated working arrangement.

Hydro-Québec has already filed the documents that constitute the basis for the refurbishing project. However, Hydro-Québec must also explain to the Commission how safety will be maintained even though the refurbishment project has been postponed. Many elements of the response are to be found in those documents, and must be put into perspective.

4. Schedule

The schedule set out in the statement of work in this protocol is intended to align with the time line for the site licence renewal on December 31, 2010, and the lead time notices required in the *Canadian Nuclear Safety Commission Rules of Procedure* [2].

It is recognized that the amount of work included in this schedule is considerable, and that there may be risks associated with its execution, which could cause delays. To ensure that the schedule is adhered to, all potential risks will be dealt with in a timely manner through adjustments of the resources or the time line of this protocol. These adjustments will be made through the protocol revision process outlined below.

The licensee may propose compensatory solutions where the risks warrant it.

5. Roles and Responsibilities

5.1 CNSC Governance Structure

The CNSC has created a steering committee for the renewal of operating licence for the Gentilly-2 reactor to provide strategic-level direction and senior management oversight and support to the programs associated with the five-year licence renewal.

The steering committee is chaired by the Executive VP, Regulatory Operations Branch (ROB) and formed by all relevant executive directorates, including:

- Vice-President of the Technical Support Branch;
- Director General of the Directorate of Power Reactors
- Director General of the Directorate of Assessment and Analysis;
- Director General of the Directorate of Environmental and Radiation Protection and Assessment;
- Director of Gentilly-2/Point Lepreau Regulatory Program Division
- Project Manager (Secretary); and
- Others, as needed.

The objective of the steering committee is to enable CNSC staff to fulfill its mandate of providing recommendations to the Commission regarding the operating licence renewal of Gentilly-2 in 2010. Its enabling function is fulfilled by ensuring that the Gentilly-2 licensing activity:

- receives appropriate priority;
- is adequately resourced;
- progresses according to schedule;
- is conducted in accordance with project management practices;
- contains appropriate audit plans;
- is consistent in its application and requirements; and

- respects approved processes and technical directions.

The steering committee is directly accountable to the CNSC President through the EVP ROB.

5.2 Hydro-Québec Governance Structure

Hydro-Québec has established a management team made up of managers and senior managers to review and approve recommendations:

- General Manager, Nuclear Development and Production;
- Director, Nuclear Generation;
- Plant Manager, Gentilly-2;
- Chief, Technical Services;
- Chief, Integrated Work Management; and
- others, as needed.

6. Organization Representatives

The organization representatives for these activities are responsible for all matters concerning the work under this Protocol and bring the matter to their respective governance bodies, should problems arise during the work that may affect the schedule or the scope of the work.

For the purposes of this Protocol, CNSC staff shall be represented by:

1. Director, GPLRPD (position currently held by F. Rinfret) for matters related to governance.

Telephone Number:	613-996-2193
Mobile Telephone:	613-791-0267
Fax Number:	613-992-4572
e-mail:	Francois.Rinfret@cnsccsn.gc.ca
2. Gentilly-2 licence renewal Project Manager (position currently held by I. Gingras) for matters related to implementation.

Telephone Number:	613-995-2895
Mobile Telephone:	613-298-1868
Fax Number:	613-995-5086
e-mail:	Isabelle.Gingras@cnsccsn.gc.ca

For the purposes of this Protocol, Hydro-Québec shall be represented by:

1. Plant Manager - Gentilly-2 (position currently held by C. Gélinas) for matters related to governance.

Telephone Number: 819-298-2943, ext. 7907
Mobile Telephone: 819-692-2407
e-mail: Gelinas.Claude@hydro.qc.ca

2. Chief, Integrated Work Management – Gentilly-2 (position currently held by A. Faler) for matters related to implementation.

Telephone Number 819-298-2943, ext. 5166
Mobile Telephone: 819-269-0239
Fax Number: 819-298-5166
e-mail: Faler.Ann@hydro.qc.ca

Either Party hereto may, by written notice, change any of its appointees mentioned above.

7. Statement of Work

This set of high-level tasks and milestones are derived from the process documented in RD-360 (draft 2010) [3] and from the content of CMD 10-H15. The CMD featured discussion action items in which no closure dates were specified. In addition, the documents submitted by Hydro-Québec did not contain sufficient information to demonstrate that the plant can be safely operated after the projected start of the refurbishment work, i.e. in spring 2011 [4]. The topic of quality assurance should be considered in order to demonstrate the capacity of the licensee to begin refurbishment. The postponement also affects the planned a production shutdown in 2011. Here, therefore, are the key elements of the high-level plan.

This chapter includes the information required to develop a complete Level 1 plan by specifying the milestones and tasks to be achieved.

7.1 Relicensing Technical Scope

This scope is divided in five phases:

Phase 1	Definition of HQ's Operating Plan	Agreement on the format and content of an operating plan - Development and submission of the operating plan by HQ
		Review of the operating plan and approval by CNSC Review of activities (regulatory commitments) of a 2011 shutdown or other, as appropriate, by CNSC
		Recommendation of the operating plan to CMD - CNSC
Phase 2	Closure of open technical action items and disposition	Joint review of open CMD 10-H15 action items -
		Analysis of the closure plans for the CMD H15 open action items: (gaps and open) -
		Closure plan follow-up – <ul style="list-style-type: none"> • AIA (authorized inspection agency) • DR-24 • Three procedures – component quality Submission of the quality assurance (QA) improvement plan - HQ Discussion of new, important action items opened in 2010 before filing the CMD in early October 2010 (SIR)
		Decision by CNSC to transfer action items of parts of action item elements to the LCH or other process
Phase 3	Development of the Licence Conditions Handbook (LCH)	Drafting and submission of the plans for transitioning to new standards - HQ Agreement on transition plans - Drafting of licence (draft) and LCH (draft)
Phase 4	Follow-up and closure on improvement plans	Follow-up and closure on open action items - HQ and CNSC Follow-up and closure on transition plans by HQ and CNSC in the LCH - HQ and CNSC Additional CMD if required - CNSC
Phase 5	CMD preparation and approval	Preparation of the standard CMD by CNSC Approval of the standard CMD by CNSC senior management

The time periods for each phase are shown in Section 7.2.

The timeline for Phase 5 will be specified once the licensee's application to extend the current operating licence of the Gentilly-2 reactor has been received. This protocol is no longer in effect

once the process initiated to renew the operating licence of the reactor and the waste management facility is completed.

7.2 Activities and Deliverables

The deliverables are divided as follows:

- Documents to be produced and tasks to be carried out
- Common Deliverables
- Meetings
- HQ Additional Deliverables
- CNSC Additional Deliverables

7.2.1 Document Deliverables

Document Deliverables	Target Date	Status and Actioned Organization(s)
Phase 1		
Produce Operating Plan	October 8, 2010	HQ
Approve Operating Plan	October 29, 2010	CNSC
Recommend in the CMD	November 5, 2010	CNSC
Phase 2		
Joint revue of open CMD 10-H15 action items and Production of List H15	September 24, 2010	CNSC-HQ
Acceptance of List H15 content	October 1, 2010	CNSC-HQ
Contract between HQ and authorized inspection agency (AIA)	December 31, 2010	HQ
Quality assurance program for pressure-holding devices (HQ doc DR-24) produced by HQ	October 15, 2010	HQ
DR-24 approved	December 31, 2010	HQ (RBQ)
Procedures for pressure-holding component QA program (Registration, Classification, Reconciliation)	October 15, 2010	HQ
Procedures for pressure-holding component QA program approved	December 31, 2010	CNSC
Preparation of the QA improvement plan by HQ	September 20, 2010	HQ
Submission of the QA improvement plan by HQ	October 1, 2010	HQ
Approval of the QA improvement plan by HQ	October 7, 2010	CNSC

Document Deliverables	Target Date	Status and Actioned Organization(s)
Produce post-CMD-H15 action item list	October 29, 2010	CNSC-HQ
Sharing of follow-up between LCH and other document process ¹ – Amended List H15	October 29, 2010	CNSC-HQ

Phase 3		
Discussions on the wording of the LCH and inclusion of the HQ transition plans	October 1, 2010	CNSC - HQ
Integration of HQ comments to the LCH	October 4, 2010	CNSC
Discussion meeting	October 5, 2010	CNSC - HQ
Integration of CNSC comments on the transition plans and LCH	October 8, 2010	CNSC
Drafts completed, licence and LCH	October 22, 2010	CNSC
Phase 4		
LCH ready for internal signatures and draft of additional LCH	October 15, 2010	CNSC
Phase 5		
Filing of licence renewal CMD	November 8, 2010	CNSC
Joint document and HQ presentation	November 8, 2010	HQ

7.2.2 Other Deliverables

Meetings

Working Level Meetings

Monthly Hydro-Québec/CNSC review meetings will be held to review progress on the work and highlight any potential major issues or disputes. At least two of the following persons shall attend these review meetings:

¹ TR NOTE: Or is this a *process document*? Please adjust as required.

- Director, CNSC GPLRPD
- CNSC Project Manager, or replacement
- Hydro-Québec Plant Manager
- Hydro-Québec Project Manager or replacement

Technical Meetings

Meetings between technical experts at the CNSC and Hydro-Québec will be arranged as the need arises. The organization representatives, or their designates, will participate in technical meetings to provide continuity in the Gentilly-2 licence renewal process.

Executive Meetings

Telephone calls every two weeks and other meetings as needed.

7.3. Conflict Resolution Process

CNSC staff and Hydro-Québec staff have agreed to coordinate the work required to renew the operating licence of the Gentilly-2 reactor, in accordance with the NSCA. Disagreements may arise during the execution of the work. A review and dispute resolution mechanism will be used during the review to ensure fairness and assist timely completion.

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

1. Monthly Hydro-Québec/CNSC review meetings will be held to review progress and highlight any potential major issues or disputes.
2. Government policies on regulatory effectiveness, as well as established licensing requirements, will serve as the framework for decisions on issues to be resolved. This must, however, be agreed upon by both parties.
3. It is the intention of both parties to resolve issues that may arise at these monthly meetings.
4. 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 committee within two weeks of failure to resolve, and forwarded to the Senior Management Level (Step 2).

Step 2: Resolution at the Senior Management Level

1. A copy of all documentation describing the issue will be provided to the Director General, Directorate of Nuclear Cycle and Facilities Regulations (CNSC), the Director General, Assessment and Analysis (CNSC) and the Director, Nuclear Generation Directorate (Hydro-Québec), who shall meet within 14 days following receipt of that documentation to resolve the issue. The resolution process shall be documented.
2. Issues that cannot be resolved at this level will be referred to the Executive Vice-President Level (Step 3) within two weeks, supported by the original or revised documentation from Step 1.

Step 3: Resolution at the Executive Level

A copy of the documentation describing an issue not resolved at Step 2 will be sent to the Executive Vice President, Regulatory Operations Branch (CNSC) and the General Manager, Nuclear Development and Generation (Hydro-Québec), who will meet within two weeks following receipt of that documentation to resolve the issue.

8. Future Revisions of the Protocol

Future revisions of this Protocol will be coordinated by representatives of the organizations and must be approved by the organizations' governance structures.

9. References

- [1] *Nuclear Safety and Control Act (NSCA)*, 1997, ch.9
- [2] *Canadian Nuclear Safety Commission Rules of Procedure, SOR/2000-211*.
- [3] RD-360, "Life Extension of Nuclear Power Plants," February 2008. (The 2010 version being drafted.)
- [4] Letter from Rinfret to Gélinas, "Operating plan and refurbishment," August 9,² 2010, E-docs 3592410
- [5] Letter from Rinfret to Gélinas, "Follow-up: Quality Management [translation]," August 9, 2010, E-docs 3592032

² TR NOTE: My searches produce this date for this letter; please verify and adjust as required.

10. Glossary of Terms

CNSC	Canadian Nuclear Safety Commission
CMD	Commission Member Document (CNSC)
ROB	Regulatory Operations Branch (CNSC)
GPLRPD	Gentilly-2/Point Lepreau Regulatory Program Division (CNSC)
DR-24	Document describing the quality program for pressure-holding devices (Hydro-Québec for Gentilly-2)
HQ	Hydro-Québec
Liste H15	Joint CNSC-Hydro-Québec document describing open CMD-10-H15 action times to ensure their follow-up

Date: _____

Louise Pelletier
General Manager, Nuclear Development and Generation
Hydro-Québec

Date: _____

Ramzi Jammal
Executive Vice-President
Canadian Nuclear Safety Commission
