



## **Supplementary Information**

### **Presentation from Northwatch**

In the Matter of

#### **Bruce Power Inc. – Bruce A and B Nuclear Generating Station**

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Request for a ten-year renewal of its Nuclear Power Reactor Operating Licence for the Bruce A and B Nuclear Generating Station

**Commission Public Hearing – Part 2**

**May 28-31, 2018**

## **Renseignements supplémentaires**

### **Présentation de Northwatch**

À l'égard de

#### **Bruce Power Inc. - Centrale nucléaire de Bruce A et Bruce B**

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Demande de renouvellement, pour une période de dix ans, de son permis d'exploitation d'un réacteur nucléaire de puissance à la centrale nucléaire de Bruce A et Bruce B

**Audience publique de la Commission –  
Partie 2**

**28-31 mai 2018**



**Comment on the Application by Bruce Power Inc.  
(Bruce Power) to Renew its Power Reactor  
Operating Licence (PROL) for the Bruce Nuclear  
Generating Stations A and B**

Ref. 2018-H-02



**Northwatch**

Has Bruce Power provided adequate information about radioactive waste and its management, primarily in their application to renew their operating license, and secondarily in supporting documents?

The *General Nuclear Safety and Control Regulation Requirement* (herein “*General Regulations*”) sets out in Section 3 that:

*An application for a licence shall contain the following information:*

*(j) the name, quantity, form, origin and volume of any radioactive waste or hazardous waste that may result from the activity to be licensed, including waste that may be stored, managed, processed, or disposed of at the site of the activity to be licensed, and the proposed method for managing and disposing of that waste;*

June 30, 2017

NK21-CORR-00531-13493  
NK29-CORR-00531-14085  
NK37-CORR-00531-02768

Mr. M. Leblanc  
Commission Secretary  
Canadian Nuclear Safety Commission  
P.O. Box 1046, Station B  
280 Slater Street  
Ottawa, Ontario  
K1P 5S9

Dear Mr. Leblanc:

Application for the renewal of the Power Reactor Operating Licence

The purpose of this letter is:

- to submit an application for the renewal of the Nuclear Power Licence Bruce Nuclear Generation Stations A and B, licence (PROL) for a period of 10 years from September 1, 2016, pursuant to the Nuclear Safety and Control Act (NSCA), S. 5 regulations under the Nuclear Safety and Control Act;
- to request an amendment of the PRDL to remove risk regulations under the NSCA, Section 24(2) and the GNSCR pursuant to the NSCA, Section 24(2) and the GNSCR;
- to request acceptance of the Integrated Implementation with REGDOC 2.3.3, Section 6;
- to request the IIP be included in the Licensing by the regulatory scope of the major component risk (including the Environmental Risk Assessment) in accordance with LCH-BNGS-P002, Section 1;
- to provide supporting information requested by the Commission on the proposed plan for decommissioning of the major component risk in accordance with LCH, Section 11.2.

In Reference 2, Bruce Power notified the Commission of the intent to proceed with the component replacement for life extension of Bruce Power's nuclear facilities.

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Vice President - Nuclear Oversight and Regulatory Affairs  
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## Bruce Power's licence renewal process and the Life-Extension Program

Bruce Power currently has a licence to operate the site until 2020, however, the company is formally seeking a renewal to this licence in 2018 to reflect the new outlook and work program for the facility, following the announcement of a commercial framework with the IESO last year. The licence renewal application will follow the rigorous and transparent public process established by the Canadian Nuclear Safety Commission and will include current life-extension and future Major Component Replacement work as part of this process.

This page offers updates to our licence renewal process, recent news and upcoming key dates. For specific licence renewal questions, please email us.

### Recent News

Bruce Power partners with Council of the Great Lakes Region on three-year climate change study

Community support for Bruce Power's Life-Extension Program remains high

Indigenous Relations Supplier Network to connect nuclear partners with communities

### Key dates

April 16, 2018: Interventions due to the Canadian Nuclear Safety Commission's notice of public hearing for more info

May 30 and 31, 2018: Relicensing Hearing, Part 2, Towns of Highland Conference Room, 19 Midwestern Way, Kincardine, ON

### Our policies

Environment Policy

Indigenous Relations Policy

Occupational Health and Safety Policy

Archived Webinars

January 31

November 16

October 27

September 26

### Relicensing materials

Supplement 1 - Bruce Assessment Report Implementation

Supplement 2 - Replacer

Supplement 3 - Staff

Supplement 4 - Other

etc.

Part 3 Health, Safety and Environment Documents, Submissions and Bruce Power

Bruce Power Community Interest, Local Communities

Bruce Power Relicensing Renewal Day 1 presentation

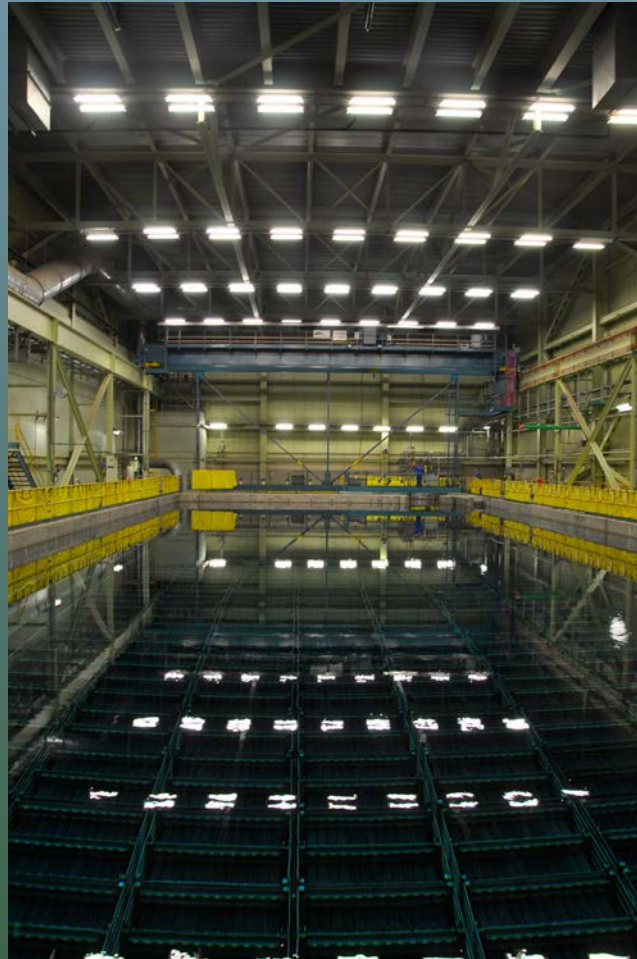


RECOMMENDATION: The Commission should suspend decision-making with respect to Bruce Power's license application until all **deficiencies in pertinent information** have been addressed.

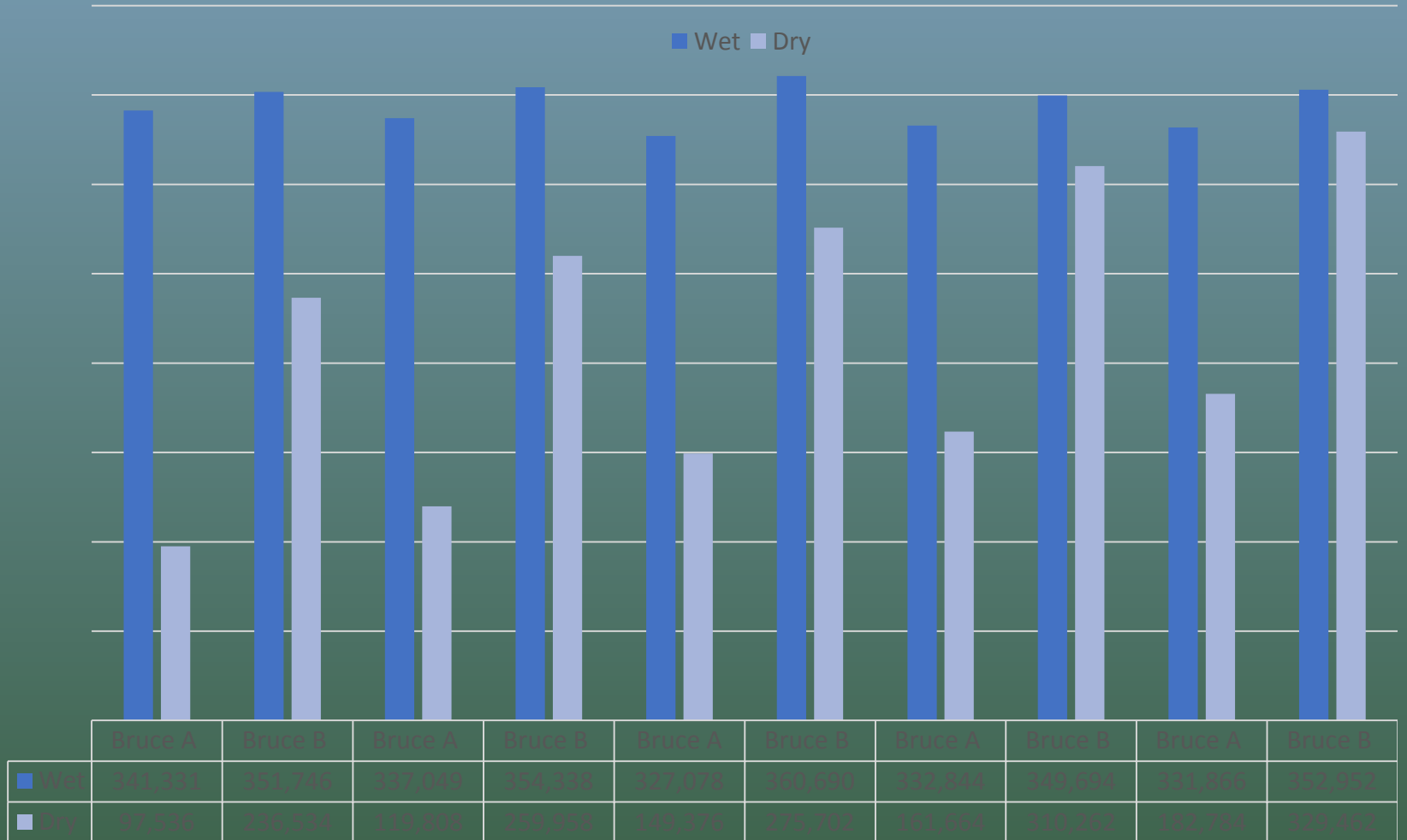
RECOMMENDATION: The CNSC should direct Bruce Power to provide a **detailed inventory of waste transfers** into and out of the Bruce Nuclear Generating Station which are specific to their operations or under their power (i.e. not the activities of Ontario Power Generation) properties, including transfers from other operations in Canada, and transfers from the U.S. into Canada, other than to the Western Waste Management Facility. The inventory should include information that allows the user to trace waste volumes from point of generation through treatment to long term storage / disposition.

RECOMMENDATION: The CNSC should establish a publicly accessible **registry of waste transfers** between operations / sites in Canada, and transfers in and out of Canada.

What is the condition and quality of the irradiated fuel and its management in Bruce Power's operations?



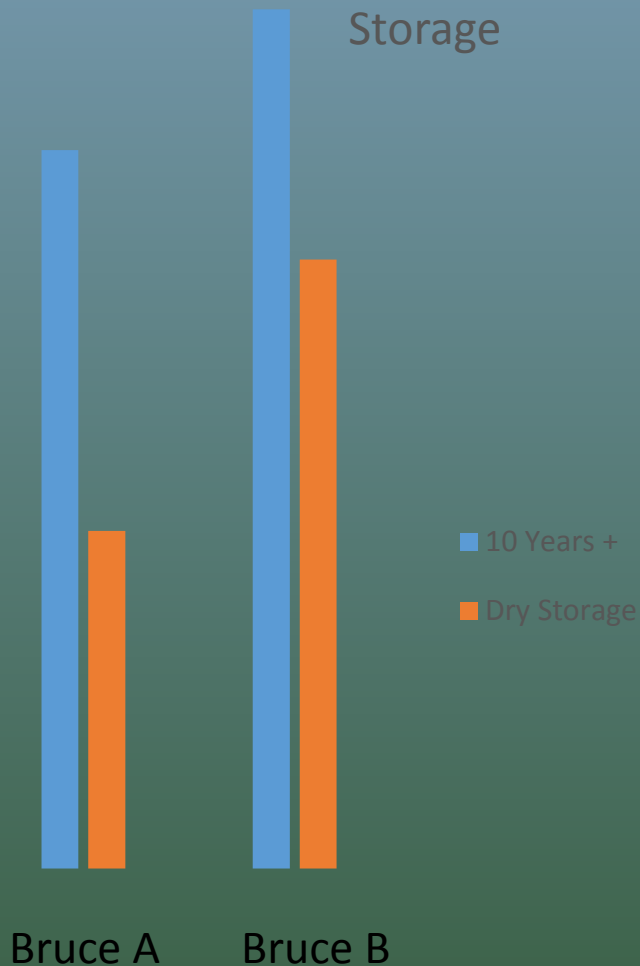
# Irradiated Fuel Status 2013-2017



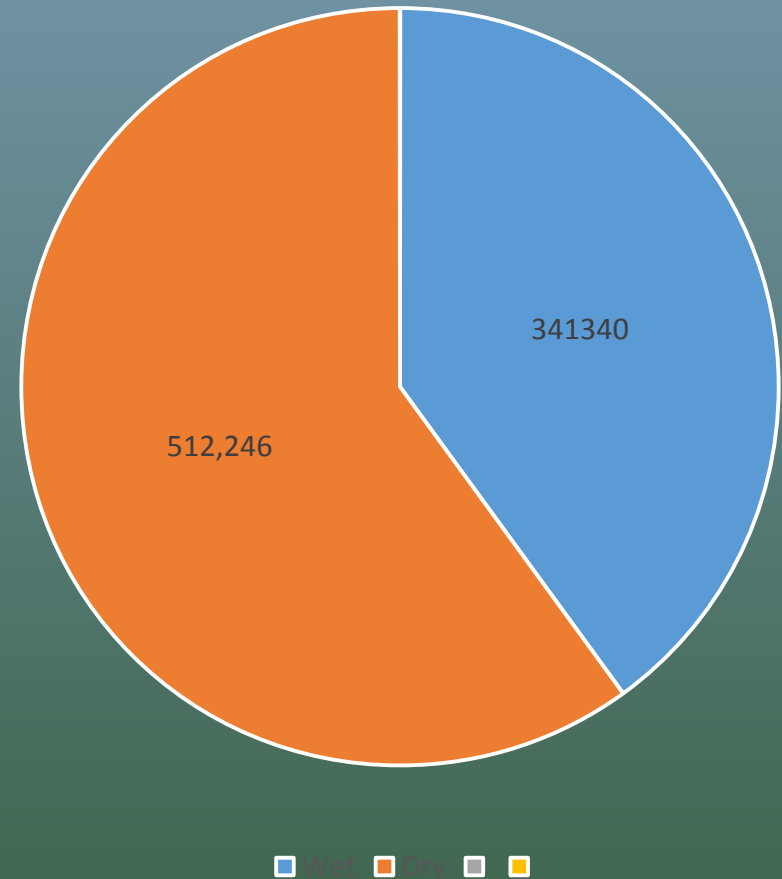


# Status of Ten Year Old Irradiated Fuel

## Ten Year Old Irradiated Fuel Compared to Irradiated Fuel in Dry Storage



## Ten Year Old Irradiated Fuel



RECOMMENDATION: Require that the issue of **fuel defects** – and any other operational challenges that were initiated by the previous refurbishment activities – be fully understood and fully resolved prior to any additional refurbishment / Major Component Replacement campaigns be commenced.

RECOMMENDATION: Require that any root cause related to operational failures or issues during the **previous refurbishment** campaign be fully understood and that understanding be demonstrated by operational safeguards that will be employed during any future similar refurbishment or replacement efforts.

RECOMMENDATION: **Limit operating licence** extension to a period of not greater than five years, or for shorter periods to coincide with refurbishment milestones should Bruce Power proceed with refurbishment / Major Component Replacement of additional units at the Bruce Nuclear Generating Station.

RECOMMENDATION: Require Bruce Power to undertake a comprehensive assessment of the integrity and function of the **irradiated fuel bays**, including an analysis for the effects of aging and whether the existing structures are and/or will remain sufficiently robust over the proposed period of extended operations at Bruce NGS.

# **Truth and Reconciliation Commission of Canada: Calls to Action**

RECOMMENDATION: The Commission should seek reconciliation with Saugeen Ojibway Nation on the matter of how decisions are to be made with respect to operations at Bruce Nuclear Generating Station, including operations and activities undertaken by Bruce Power and by Ontario Power Generation.

