Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

UNPROTECTED/ NON PROTÉGÉ

CMD 23-H103Q

File/dossier : 6.01.07
Date : 2023-06-05
e-Doc PDF : 7056203

Questions from Commission Panel Members

In the Matter of

Bruce Power Inc.
Bruce Nuclear Generating Stations A and B

Application to amend the power reactor operating licence for the Bruce Nuclear Generating Stations (NGS) A and B

Hearing in writing based on written submissions

April 2023

Questions des membres de la formation de la Commission

À l'égard de

Bruce Power Inc.
Centrales nucléaires de Bruce-A et B

Demande visant à modifier son permis d'exploitation d'un réacteur de puissance pour les centrales nucléaires de Bruce-A et B

Audience par écrit fondée sur des mémoires

Avril 2023

Canada

Question(s) from Commission Panel Member(s)	Question(s) des membre(s) de la formation de la Commission

INTRODUCTION

The Panel of the Commission, in conducting a Hearing in Writing[1] to consider an application from Bruce Power Inc. (Bruce Power) for the amendment of its power reactor operating licence for the Bruce Nuclear Generating Stations (NGS) A and B, has reviewed the written submissions provided by CNSC staff in Commission Member Document (CMD) CMD 23-H103, and Bruce Power in its application, CMD 23-H103.1. The Panel of the Commission also reviewed written submissions from 8 intervenors and the submission by the CNSC's External Advisory Committee on Pressure Tubes, CMD 23-H103.10. The Panel of the Commission requires additional information with respect the questions set out below.

QUESTIONS

The Panel's questions for CNSC staff are set out in Table 1 and the Panel's questions for Bruce Power are set out in Table 2.

Table 1: CMD 23-H103Q Questions for CNSC staff

#	Commission Panel Questions for CNSC Staff
1.	The Commission requires responses to the following questions raised by the EAC. EAC Question 1: Will there be an expectation somewhere to require that the degree of communication with Indigenous and other local community groups be enhanced until the level of engagement/communication is mutually agreed to?
2.	It is noted that the Finite Element Diffusion analysis referred to in the June 2022 correspondence (Bruce Power Reference #4, BP-CORR-00531-02820) concludes that in inlet rolled joint regions, the high Heq concentrations are on the outside surface of the pressure tube and don't influence flaws on the inside surface. EAC Question 4: If the Finite Element Diffusion analysis is correct, what will be the effect on the validity of scrape samples on the inside surface of a pressure tube to measure the Heq level in the tube wall?

[1] Revised Notice of Public Hearing 2023 H-103, March 7, 2023

#	Commission Panel Questions for CNSC Staff
3.	Canadian Nuclear Laboratories refers to extensive research and development (R&D) over the years, especially through the Fuel Channel Life Management COG Project. EAC Question 5. Is there a document somewhere that updates the status of all the planned work that was discussed / promised at previous hearings? What percentage of each of the proposed work activities has been completed?
4.	With respect to addressing the SON's concerns: EAC Question 7: How does the CNSC decide whether the information flow to the SON and other stakeholder groups has been adequate?

Table 2: CMD 23-H103Q Questions for Bruce Power

#	Commission Panel Questions for Bruce Power
1.	The Commission requires responses to the following questions raised by the EAC. EAC Question 1: Will there be an expectation somewhere to require that the degree of communication with Indigenous and other local community groups be enhanced until the level of engagement/communication is mutually agreed to?
2.	CNSC staff still considers the Region of Interest to be "…the region encompassing the full circumference of a pressure tube…" EAC Question 2: Does Bruce Power accept the full 360-degree extent of the Region of Interest at the inlet and outlet?
3.	The Finite Element Diffusion analysis referred to in the June 2022 correspondence (Bruce Power Reference #4, BP-CORR-00531-02820) concludes that in inlet rolled joint regions, the high Heq concentrations are on the outside surface of the pressure tube and don't influence flaws on the inside surface. EAC Question 3: Has the conclusion of the Finite Element Diffusion analysis been verified on samples from the removed Pressure Tubes?
4.	EAC Question 4: If the Finite Element Diffusion analysis is correct, what will be the effect on the validity of scrape samples on the inside surface of a pressure tube to measure the Heq level in the tube wall?

#	Commission Panel Questions for Bruce Power
5.	Canadian Nuclear Laboratories refers to extensive research and development (R&D) over the years, especially through the Fuel Channel Life Management COG Project. EAC Question 5. Is there a document somewhere that updates the status of all the planned work that was discussed / promised at previous hearings? What percentage of each of the proposed work activities has been completed?
6.	The Saugeen Ojibway Nation raise concerns regarding the argument that a pressure tube failure is in the Design Basis and would therefore not impact the public. EAC Q6: If the risk of a pressure tube failure is fully mitigated by the safety systems in the plant, why did OPG and Bruce Power spend >$100M on R&D to prevent such failures from happening?
7.	With respect to addressing the SON's concerns: EAC Question 7: How does Bruce Power decide whether the information flow to the SON and other stakeholder groups has been adequate?

REQUEST

CNSC staff and Bruce Power shall submit responses by way of supplementary CMD on or before 2023-06-16, if possible. Bruce Power and CNSC staff are expected to inform the Registry of any concerns respecting this deadline within five working days of receiving this CMDQ.

Name:	Denis Saumure, Commission Registrar *On behalf of the Panel of the Commission*	Date: 2023-06-05
Signature: Saumure, Denis	Digitally signed by Saumure, Denis DN: C=CA, O=GC, OU=CNSC-CCSN, CN="Saumure, Denis" Reason: I am the author of this document Location: Date: 2023.06.05 12:57:28-04'00' Foxit PDF Editor Version: 12.1.2	