



**Written submission from the  
Society of United Professionals**

**Mémoire de la  
Society of United Professionals**

In the Matter of

À l'égard de

**Application for a temporary exemption  
from sections 23.1.2(2) and 23.2.1 of  
REGDOC-2.2.3, Personnel Certification,  
Volume III: Certification of Persons  
Working at Nuclear Power Plants**

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**Demande visant l'exemption temporaire de  
l'application des sections 23.1.2(2) et 23.2.1 du  
document REGDOC-2.2.3, Accréditation du  
personnel, tome III : Accréditation des  
personnes qui travaillent dans des centrales  
nucléaires**

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Public Hearing - Hearing in writing based on  
written submissions

Audience Publique - Audience fondée sur des  
mémoires

**July 2021**

**Juillet 2021**



April 23, 2021

BY EMAIL ONLY

Dear Canadian Nuclear Safety Commission,

I am writing on behalf of the Society of United Professionals' Bruce Power Local, which represents more than 1,100 engineers, scientists, supervisors, and other professional staff at Bruce Power. Included among our members are Bruce Power Control Room Shift Supervisors, Shift Supervisors in Training and Certification Training Staff.

We have reviewed the **Notice of Hearing in Writing issued April 8, 2021 (Ref. 2021-H-103)** and urge the Commission to reject this temporary exemption requested by Bruce Power:

"The current license requires Bruce Power to implement and maintain certification programs in accordance with CNSC REGDOC-2.2.3, Volume III. Bruce Power is requesting a temporary exemption from sections 23.1.2(2) and 23.2.1 and seeking authorization for the following alternative requirements:

- That reactor operators previously certified at an NPP of the same type have six months of additional plant experience at the NPP where certification is sought, instead of at least one year."

This is an apparent effort to reduce training and certification requirements for employees who may have previously worked at Pickering NPP. While Bruce Power's Units A and B are similar in conceptual design to those at Pickering, the age, systems layout and technological differences mean that an employee will still require the standard amount of time to become familiar with the individual station regardless of previous experience at Pickering or any other NPP in Canada or abroad. As licensed staff, Control Room Operators must have an adequate depth knowledge of the station specifics to be effectively competent.

For greater clarity, I will detail our three primary areas of concern: station layout considerations, emergency response duties, and nomenclature.

#### Station Layout Considerations

The physical locations of primary accessible equipment by Operations Staff differs greatly between the Pickering CANDU 500 and the Bruce CANDU 750 Series. Pickering CANDU 500s have most of their reactor components located in the containment structure that cannot be easily accessed during operations. The Bruce model, on the other hand, has many components outside of containment for easy access. These components include the heat transport pumps, feed and bleed systems, steam generators, and reactivity deck. This model requires extensive knowledge of location and elevations to properly assess hazards to the station staff during an emergency, safety systems tests, executing standard operating procedures or authorization of work protection. A field operator at these stations normally requires two years of station experience to achieve their NO4 qualification. This qualification is also station specific as there are subtle differences even between Bruce A and Bruce B (such as the Secondary Control Room



location). These two years are the minimum requirement to be able to internally apply for the Authorized Nuclear Operator in Training (ANOIT) program at Bruce Power.

#### Emergency Response Duties

In the event of a Loss of Coolant Accident or station emergency, Control Room Operators rely on their field experience as Operators or Engineers to assess the hazards that might be present during various combinations of scenarios. If the Control Room Operator does not possess an adequate understanding of the station layout, the risk to personnel and the public is elevated by unfamiliarity and resultant errors in response or incorrect mental modelling. Pickering operators may struggle with vastly different component locations and their proximity to ongoing work when personnel are not given an adequate amount of station time to understand and be able to quickly recall the specifics of each location. This can only be achieved through the standardized routines that an Operator or Engineer must perform before entering the certification program.

#### Nomenclature

Pickering and Bruce stations each have established unique nomenclature associated with their systems identification. There is some similarity as they are both designed by the same manufacturer and implemented by the original operator (Ontario Hydro), however in the case of issuing work protection that difference between the stations can be one out of six digits. If a Pickering operator adapts their station knowledge from their original plant without a suitable amount of time to understand the differences between systems, errors may be present in their decision-making that could result in significant consequences.

In conclusion, the Society of United Professionals urges the Commission to reject Bruce Power's reduced training standards as it will compromise employee and public safety and erode Bruce Power's nuclear safety culture. I would be pleased to discuss these concerns further at [tiislere@thesociety.ca](mailto:tiislere@thesociety.ca) or (226) 237-9105.

Yours Sincerely,

Eric Tiisler,  
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Simulator Specialist, Bruce Power