



Written submission from the Source Security Working Group

Mémoire de Source Security Working Group

In the Matter of

À l'égard de

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

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

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

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

Commission Public Hearing – Part 2

Audience publique de la Commission – Partie 2

May 28-31, 2018

28-31 mai 2018

Source Security Working Group

777 6th St NW, Ste 510

Washington, DC 20001

Canadian Nuclear Safety Commission
c/o Louise Levert, Secretariat
280 Slater St., Box 1046
Ottawa, ON K1P 5S9

April 2, 2018

Re: Letter of Representation and Support in Respect of Bruce Powers Application for a License Extension

The Source Security Working Group

The Source Security Working Group (SSWG) is an alliance of organizations who seek to ensure continued access to radiological sources. The SSWG works with legislative and regulatory bodies to ensure that policymakers are aware of the contribution made by radiological materials and to ensure laws and policies are risk informed, science-based, and support the highest levels of public health and safety.

The Source Security Working Group's relationship with Bruce Power

Cobalt-60 produced by Bruce Power is used for the sterilization of medical devices, treatment of some forms of cancer, enhancing food safety and many other beneficial applications. The irradiation community as represented by the SSWG depends on the reliable supply of Cobalt-60 by Bruce Power over the long term.

Bruce Power's safety record demonstrates a high degree of professionalism resulting in significant social and economic benefits through the application of Cobalt-60 that they produce. Their 10-year license renewal application demonstrates a desire to continue to support the beneficial applications of irradiation technology.

Cobalt-60 – A critical technology that delivers safety and quality

In the mid-1950s the increasing demand for sterile single-use medical devices led to a rapid expansion in the use of gamma irradiation using Cobalt-60 to sterilize products. Since this time the applications of radiation processing using Cobalt-60 have grown enormously and become an important component in the manufacture of a wide range of products and materials. Today, gamma irradiation is an international industry that positively impacts the health and wellbeing of a large proportion of the world's population.

Many other products and materials are exposed to ionizing radiation in order to improve their characteristics or to make them safe.

Importance of Bruce Power to the global Cobalt-60 supply chain

Bruce Power currently produces over half the world's supply of Cobalt-60. To guarantee a reliable long term global supply of Cobalt-60, Bruce Power and Nordion signed a long-term agreement in late-2016 which will see the companies work together through 2064.

The agreement extends a previous supply arrangement and now covers the life of the Bruce Power site that will operate up to 2064 once life-extension maintenance programs are completed. The agreement also includes the supply of medical-grade High Specific Activity (HSA) Cobalt that is used to treat brain tumours. Bruce Power will harvest its first batch of HSA Cobalt in early-2019.

The SSWG supports the Bruce Power License Application

Canada is the global leader in the manufacture and supply of Cobalt-60. Ionizing radiation delivered via this Cobalt-60 provides enormous benefits to society, particularly in the field of healthcare. Research using radiation technologies is enabling nano-pharma products to deliver medical isotopes to specific organs where they can treat tumors with minimal damage to nearby tissue and organs. The continued availability of Cobalt-60 is vital and Bruce Power and Canada are critical to the international supply chain.

The Bruce Powers application for a 10 Year License Extension is a powerful and greatly appreciated commitment to an industry that is low value compared to the company's overall corporate mission. The SSWG and the wider irradiation community greatly appreciate the support that Bruce Power is making to our community. We believe that this further demonstrates their serious commitment to social and environmental responsibility.

Source Security Working Group members American Nuclear Society, Elekta, Gamma Industry Processing Alliance, International Irradiation Association, and International Source Users and Producers Association support the Bruce Power 10 Year License Extension Request.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. H. Piercy', with a stylized flourish at the end.

Craig H. Piercy
Co-Chair, Source Security Working Group