### Submission on

# **Understanding the Choices: The Future Management of Canada's Used Nuclear Fuel**

from

Duane Pendergast Computare

Website: <a href="https://www.computare.org">www.computare.org</a>
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## Introduction

Reading this second discussion document leaves the impression that the NWMO and Canadians are moving toward better understanding of the role of nuclear energy in Canada's future.

The scope of discussion has expanded subtly to include recognition of the benefits of nuclear energy to Canadians. That benefit is explicitly acknowledged in the first few paragraphs. The first discussion document focused more narrowly on the problem posed by used fuel while essentially ignoring benefits from the nuclear energy available from uranium and other nuclear resources including the used fuel itself.

A good portion of this shift of direction seems to be coming from the dialogues with Canadians. Many of the non-commissioned submissions also urge consideration of the so far untapped potential to derive far more energy from fertile and fissile nuclear fuel resources through development of alternative reactor concepts.

My overall impression is that the approach taken by NWMO to involve Canadians is leading to more sober and practical consideration of the nuclear "waste" issue in the context of the long term need for energy.

A few more focused comments follow.

## **Canadian Values**

Chapter 2 summarizes input from a large group of Canadians selected from outside the usual stakeholder groups such as the nuclear industry and the environmental groups which have historically opposed nuclear energy. The values they expressed with respect to safety, responsibility to the present and to future generations, the need to wisely use resources, developing knowledge and the need for energy provide the basis for a sensible path forward.

Their interest in the concepts of reusing and recycling resources and finding new ways to extract energy from uranium are particularly revealing. It appears these citizens, as a

group, are open-minded and could provide more valuable guidance to the NWMO. My earlier review of the dialogue report (<a href="www.nwmo.ca/canadianvalues">www.nwmo.ca/canadianvalues</a>) suggested that the NWMO might want to consider additional dialogue with them, including exposure to stakeholders from the nuclear industry. I believe the goals and values of these Canadians are fundamentally consistent with the goals of the nuclear industry. These Canadians could be pleasantly surprised to learn more about the nuclear industries long standing concern with safety and impact on the environment. They would be impressed with the extent of existing knowledge of nuclear physics and technology which provides the basis for development of bounteous safe sustainable energy for many generations.

## **Submissions from Canadians**

There has been considerable emphasis on the potential for involvement of Canadians through the open posting of information on the internet. This new avenue for communication intrigued me soon after the establishment of the NWMO. Discussion of input received is included in Chapter 3 where it is noted that 60 submissions had been received at the time of reporting (August 2004). There are now (March 2005) on order of 130 submissions. More input from Canadians is sought through this route by NWMO, yet there is only implicit evidence that submissions which have not been "commissioned" have been factored into "Understanding the Choices".

It is noteworthy, that one individual, J.A.L. Robertson, has provided nearly 20 massive and informed submissions. His comments on this second discussion document suggest a review of the submissions should be undertaken and documented by NWMO. If the NWMO really believes there is value in these submissions beyond a head count, his suggestion makes a lot of sense.

Still, even though feedback on the submissions is lacking, I applaud the NWMO for taking the initiative to solicit critical input and for posting it on the website to further public understanding of the technology and the issues.

#### Conclusion

I've read many of the documents on the NWMO website. "Understanding the Choices" leaves me hopeful the NWMO will be able to recommend a way forward with used nuclear fuel which is consistent with overall safety of humans and the environment and recognizes the fundamental need for abundant energy to support and sustain all life on this planet in healthy and productive synergy.