



Canadian Nuclear Society
Société Nucléaire Canadienne

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"Supporting nuclear science and technology for over 25 years"
"Plus de 25 ans de promotion de la science et de la technologie nucléaires"

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[letter from the CNS to several federal Ministers]

We are writing to you on behalf of the Canadian Nuclear Society (CNS). This Society comprises more than one thousand scientists, technical experts, educators, and managers who work in Canadian nuclear science and engineering. The continuing good health of Canadian nuclear technology is a crucial component of both Canada's energy security and its future success as a technologically developed nation. Therefore, we write to encourage your support for continued federal funding of nuclear R&D in Canada, including the development of the Advanced CANDU Reactor (CANDU-ACR).

There is now a real opportunity for the federal government to give a boost to the further development of the CANDU energy system. Canada has already achieved commercial success around the world with the original CANDU design. The CANDU-ACR needs only a few years of final engineering to assure its position as a serious competitor for the massive impending market for new electricity generating capacity, as the price of natural gas, and probably also of oil, rises in response to shortages. Nothing will be more important to the "takeoff" of this improved CANDU technology venture than to have ACR units installed and operating in Canada.

The imminent need for additional electricity generation in Ontario offers a very cost-effective way to achieve this demonstration of advanced Canadian technology. In this regard, a senior member of our Society, Dr. J.T. Rogers of Carleton University, recently prepared a succinct and cogent analysis in support of the installation of more CANDU generating stations in Ontario. Professor Rogers' document is attached. You will see that his recommendation is to install nuclear units to satisfy the long-term electricity needs of Ontario, based on examination of various alternatives for future generation. This recommendation is relevant not only to Ontario, but to the whole of Canada and indeed to the world. Nuclear-electric generation using CANDU reactors can provide environmentally sound solutions to world energy supply problems, as well as major economic benefits to our nation.

The members of our Society have great pride in Canada's world-class CANDU technology, which is not only a technical success story (named in the "top ten" of Canada's engineering achievements of the last century), but an economic driver as well. Nuclear reactors supply about 16% of Canada's electricity usage, including about half the electricity needs of Ontario. According to the Canadian Energy Research Institute (CERI), the nuclear industry is worth about \$5 billion annually

to the Canadian economy, accounting for about 30,000 highly skilled direct and indirect jobs nationwide¹. In fact, the industry's influence on Canada's excellent science and engineering infrastructure extends well beyond this, including post-secondary education, advanced materials development, and nuclear medicine and other applications of radioisotopes.

It is our understanding that CANDU-ACR development is co-funded through both federal investment and the re-investment of commercial earnings by AECL. In addition, the non-nuclear "balance of plant" has been optimized for the CANDU-ACR by the Hitachi corporation, through its own investment. This funding partnership between a crown corporation, the federal government, and the private sector leverages the government's investment.

As the sole shareholder of AECL the federal government will benefit directly from this investment, but the expected return will accrue to Canada as a whole. AECL is the lead company in a broad partnership of Canadian industries now associated with nuclear energy and related Canadian technologies. Additionally, and importantly, industrial firms will also receive technology and economic benefits in terms of sustained technology development opportunities, profits and jobs.

In summary, your support for further CANDU-ACR development funding will ensure that the Canadian government will benefit through the continuing prosperity of its citizens, its technological leadership, and the security of our long-term energy supply.

Sincerely,

Bill Schneider
President

John Luxat
1st Vice-President

Dan Meneley
2nd Vice-President

Jeremy Whitlock
Past President

¹ "Economic Impact of the Nuclear Industry in Canada", Canadian Energy Research Institute, July 2003, available at: www.cna.ca/english/files/study/CNAStudySept16-03.pdf