

### A 50-Year History of Innovation.

MDS Nordion would like to offer its congratulations to Atomic Energy of Canada Limited (AECL) and National Research Universal (NRU) for reaching its 50-year milestone.

As one of Canada's important and historic innovation centers, NRU has been an integral partner in the formation of modern molecular medicine. Year over year, millions of patients around the world benefit from AECL's commitment and NRU's ability to provide medical isotopes to prevent, diagnose and treat disease.

Fifty years ago, visionaries like Dr. Bertram Brockhouse and Roy Errington saw the great potential that nuclear science had to offer, from agriculture to large scale industrial use, to medicine. Pioneers of their time, they took this science and performed wonders, accomplishing some of the most important and critical discoveries with the technology. These individuals represented some of the best and brightest minds in the industry — top minds that exemplified technological creativity coupled with keen business acumen. These people are the foundation for both the history and the success of NRU.

If they were here today, they would be in awe of the frontiers that NRU and MDS Nordion have crossed. A science that they helped to harness continues to advance modern society and modern medicine. NRU will continue to play a critical role in the future of healthcare, allowing MDS Nordion to maintain the supply of medical isotopes for use in molecular imaging and personalized medicine. These medical isotopes, combined with cutting-edge technology, will allow physicians to diagnose disease earlier and provide better and more accurate treatment options to patients.

Together we have reached over 60 countries saving countless of lives in the process. Please pass on our sincere appreciation to the AECL NRU team and all other support groups that have enabled our partnership to grow and flourish. The NRU reactor has lived up to its potential and continues to be a model for future medical technology.

Sincerely, Steve West President of MDS Nordion



Nucléaire Nuclear

September 12, 2007

Mr. Ken Petrunik **Chief Operating Officer** Atomic Energy of Canada Ltd. Sheridan Park 2251 Speakman Drive Mississauga, ON L5K 1B2

Dear Mr. Petrunik:

I would like to take this opportunity to formally congratulate Atomic Energy of Canada Limited (AECL) on the 50<sup>th</sup> anniversary of the National Research Universal (NRU) reactor.

The development of the NRU has been invaluable to Canada's nuclear industry. It has led to the development of the CANDU design which has allowed Point Lepreau Generating Station (PLGS) to operate safely and efficiently.

We have been working closely with AECL since 1999 in preparing for the PLGS Refurbishment Project and have shared a common goal for success. We look forward to continuing this productive relationship with AECL to ensure the benefits of nuclear power are available for future generations.

Please accept our heartfelt congratulations.

Yours sincerely.

Gaëtan Thomas Vice President

**NB** Power Nuclear



September 20, 2007

Brian McGee Chief Nuclear Officer AECL Chalk River Laboratories 1 Plant Rd Chalk River, ON KOJ 1J0

Dear Mr. McGee;

On behalf of WiN-Canada I would like to congratulate AECL on the 50<sup>th</sup> Anniversary of the National Research Universal (NRU) reactor. The NRU has played significant a significant role in the development of Canada's nuclear industry and its historical achievements warrant celebration.

The NRU is a world-class science facility providing scientific research to support the further development and maintenance of CANDU reactors around the world, as well as the very important production of the world's supply of medical isotopes, saving lives around the world in the treatment of cancer and other illnesses.

To all the women and men who work, or have worked, at NRU over the past 50 years, our heartfelt congratulations for all your efforts and for your important contribution to the nuclear industry.

Kind Regards,

Susan Brissette

WiN-Canada President



# nstitut canadien de la diffusion des neutrons

Prof. Dominic Ryan (CINS President) Physics Department, McGill University, 3600 University St., Montreal, Quebec, H3A 2T8, Canada

October 9th, 2007

Mr. B.E. McGee, Chief Nuclear Officer, AECL Chalk River Laboratories, 1 Plant Road, Chalk River, ON, K0J 1J0

Dear Mr. McGee,

Fifty years of successful operation is a remarkable achievement for NRU.

As Canada's largest single investment in research infrastructure, NRU has been a clear example of how large-scale multi-purpose facilities can be run for the benefit of many independent user communities. Over its 50 years of operation, NRU has enabled ground-breaking research in the nuclear power industry, engineering, nuclear medicine and advanced materials. It has provided a handsome return on the original investment, both for Canada and the rest of the world.

The Canadian Neutron Beam Centre that is based around NRU could not operate without the strong support of AECL and could not provide access to a world-class suite of neutron beam instruments without the power and flexibility of the NRU reactor. Key developments in neutron scattering methodology were made at NRU, most notably the triple-axis spectrometer designed by Nobel Laureate Prof Bertram Brockhouse and engineering stress mapper developed by Dr. Tom Holden. Both of these instruments are now to be found at *every* neutron beam laboratory in the world. These are just two of the many remarkable Canadian achievements that were enabled by NRU.

As a long time user of the NRU facility, I have benefited directly in my research, as have the over 400 members of the Canadian Institute for Neutron Scattering that I represent. We are proud to have been part of this important chapter in Canadian scientific history.

Prof. Dominic Ryan,

President.

Canadian Institute for Neutron Scattering

B.E. (Brian) McGee, Chief Nuclear Officer Atomic Energy of Canada Limited Chalk River Laboratories Chalk River, Ontario Canada

### Greetings,

On behalf of the Canadian Nuclear Society, and on the occasion of your 50th anniversary, I wish to extend our sincere best wishes and congratulations to all those, past and current, who have contributed to the remarkable national treasure that is the National Research Universal (NRU) Reactor. We are confident that the NRU and its staff will continue to benefit millions of people worldwide through the production of life saving medical isotopes for many years to come.

On behalf of the 1,150 members of the Canadian Nuclear Society (CNS), our congratulations and best wishes on this outstanding achievement.

Yours truly,

Eric L. Williams
President
Canadian Nuclear Society



October 11, 2007

**Robert Rosner** 

Director

Argonne National Laboratory 9700 South Cass Avenue, Bldg. 201 Argonne, IL 60439-4832

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B.E. (Brian) McGee Chief Nuclear Officer Chalk River Laboratories Chalk River Ontario Canada K0J 1J0

Dear Mr. McGee:

On behalf of Argonne National Laboratory, let me congratulate you on the 50th anniversary of Canada's National Research Universal reactor. To successfully operate a working reactor for 50 years — while fulfilling missions as a source of medical isotopes, a materials science research center, and a test bed for developing nuclear fuels and materials — is a truly outstanding achievement.

Sincerely,

Robert Rosner

Director, Argonne National Laboratory
President, UChicago Argonne, LLC
William E. Wrather Distinguished Service Professor,
The University of Chicago

## **Babcock & Wilcox Canada**

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Michael D. Lees President

October 4, 2007

Mr. B. E. (Brian) McGee, Chief Nuclear Officer AECL Chalk River Laboratories 1 Plant Road Chalk River, Ontario K0J 1J0 Canada

Dear Mr. McGee,

Babcock and Wilcox Canada shares a unique history in the development of commercial nuclear power in Canada. Our engineers worked closely with AECL as early as 1956 in developing a heat exchanger for NPD. We are now still working with AECL as part of Team CANDU to develop the next generation of CANDU plants.

The contributions of the National Research Universal reactor and the scientists and engineers who utilized this important Canadian facility laid the groundwork for the CANDU fleet in Canada and worldwide as well as the production of medical isotopes that extend and save lives throughout the world. I can also say that a tour through the Chalk River facilities and seeing the NRU reactor as a young student inspired me, and I'm sure countless others, to embark upon a career in the nuclear business.

On behalf of Babcock & Wilcox Canada and our thousands of employees both past and present, I congratulate you on the remarkable milestone of 50 years since the first criticality of NRU.

Sincerely,

BABCOCK & WILCOX CANADA

Michael D. Lees

President

# CANADIAN ASSOCIATION OF PHYSICISTS



## ASSOCIATION CANADIENNE DES PHYSICIENS ET PHYSICIENNES

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12 October 2007

Mr. Brian McGee, Chief Nuclear Officer AECL Chalk River Laboratories 1 Plant Road Chalk River, Ontario K0J 1J0 Politica of Care Production

2005 International Year of Physics Année internationale de la physique 2005

Dear Mr. McGee,

The Canadian Association of Physicists (CAP) is pleased to join in celebrating the 50th anniversary of Chalk River's National Research Universal reactor.

For 50 years, the NRU has been a focal point of Nuclear Physics in Canada. Scientists from everywhere use the neutron scattering facilities to characterize various types of materials as a basis for pure and applied research in a wide range of fields. Isotopes produced at the NRU are used in medical diagnosis and therapy, helping millions of people around the world every year. Knowledge gained from tests with the NRU was instrumental in making the CANDU power stations.

Throughout the years, fundamental research of the highest quality has been carried out at the NRU, especially under the leadership of Dr. Bertram Brockhouse, 1994 recipient of the Physics Nobel Prize. The CAP is proud to have awarded its first Professional Certification (P.Phys.) to Dr. Brockhouse in June 1999. That same year, the CAP established the Brockhouse Medal, awarded annually for outstanding achievement in condensed matter and material physics.

A historical perspective on the NRU, as well as a celebration of the Centennial of Rutherford's Nobel Prize, will be part of the history of physics session at the upcoming CAP Congress in Québec in June 2008.

The CAP wishes long life to the NRU. With vision and adequate resources, it will continue to be an outstanding facility for scientists from Canada and abroad undertaking both fundamental and applied research.

Louis Marchildon, P.Phys.

**CAP President** 



AGENCE DE L'OCDE POUR L'ÉNERGIE NUCLÉAIRE
OECD NUCLEAR ENERGY AGENCY

Le Directeur général The Director-General Mr. B.E. (Brian) McGee Chief Nuclear Officer AECL Chalk River Laboratories 1 Plant Road Chalk River Ontario, K0J 1J0 Canada

Issy-les-Moulineaux, 5 November 2007

Dear Mr. McGee,

On behalf of the OECD Nuclear Energy Agency, I congratulate the AECL Chalk River Laboratories on the 50<sup>th</sup> anniversary of the National Research Universal reactor.

I would like to pay tribute to the 50 years of dedicated effort from all the men and women whose hard work and insight have contributed to the successful operation of the NRU reactor. This reactor has had an important role in terms of both energy and medical applications. A landmark anniversary such as this one reminds us all of the important contribution of nuclear technologies to the welfare of mankind.

Once again, I would like to extend my sincere congratulations as you celebrate this historic milestone and wish the NRU reactor many more years ahead of successful operation.

Yours sincerely,

Luis E. Echávarri Director-General

cc. Canadian delegation to the OECD