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AECL honoured with Passport to Prosperity Award

Atomic Energy of Canada Limited (AECL) was honoured as this year's winner of the Upper Ottawa Valley Chamber of Commerce Passport to Prosperity Award.

Recognized for actively supporting young people in their career pursuits in the skilled trades, AECL's program was chosen for its partnerships with local schools, for career fairs, as a major supporter of the Deep River Science Academy and for our key role in the development of the Options skilled trades fair program (now

entering its fifth year). This is in addition to welcoming numerous co-operative education students and Ontario Youth Apprentices to the Chalk River Laboratories (CRL) where they gain valuable hands-on work experience.

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Women in Nuclear forms new chapter: CRL takes the lead

Women in Nuclear (WiN) Canada has formed a new chapter, WiN Eastern Ontario, and CRL's Tracy Gagne has been named to lead it.

WiN Canada was formed in early 2004 and has been working to support the objectives of WiN-Global and help to provide an opportunity for women to succeed in the industry through initiatives such as mentoring, networking, and personal development opportunities. In the last four years, WiN Canada has grown to more than 400 members with four established branches; the Eastern Ontario chapter brings the total to five.



AECL was approached in 2006 to help sponsor the launch of WiN's Eastern Ontario chapter, and has since proven to be a big supporter of the association.

"Women in Nuclear provides a way for both women and men to support women as nuclear professionals," says Brian McGee, Vice-President of AECL's Chalk River Laboratories. "I have had involvement with other WiN chapters and I am very enthusiastic about the benefits of establishing a WiN group on site. We are proud to support them."





In this edition of *Plain Talk*, I am going to share a recent community experience. On January 27, my wife, Beckie, and I had the pleasure of spending a wonderful evening with friends and business partners from the community at the Upper Ottawa Valley Chamber of Commerce Awards Gala. The organizers of this event deserve great credit for arranging an evening that was both fun and entertaining.

At the Chalk River Laboratories we place a great deal of value on opportunities to work with our community stakeholders and our local business partners. The platinum sponsorship of the Chamber of Commerce Gala provided us with one of these opportunities.

From a corporate perspective there were several highlights to the evening. The first was the introduction of our own Donna Roach as co-host for the event along with Tony Grace from A-Channel. Next, we were able to enjoy watching some fellow members of the AECL Chalk River team accept the Passport to Prosperity award for the School to Work program. Last semester we welcomed 16 co-operative education students and 20 Ontario Youth Apprentices to the CRL site, and we look forward to continuing with our Options skilled trades program, which is now entering its fifth year.

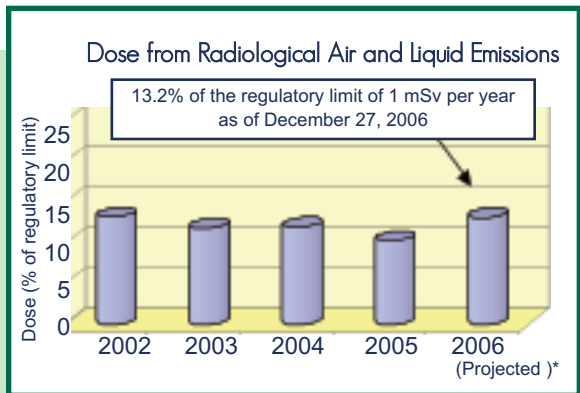
Finally, a personal highlight: I had the privilege of presenting the Lifetime Achievement Award to Mr. Charlie Butler of Butler Motors. Charlie's career achievements are outstanding and his leadership is a model for all of us in the business community. In the Upper Ottawa Valley we enjoy a community populated with many dedicated business people like Charlie, all of them working hard to fuel the local economy. At AECL Chalk River we are proud of our contribution as one of those businesses. We hope you agree.

Brian McGee
Vice-President, Nuclear Laboratories

Environmental Report

As a certified ISO 14001:2004

Environmental Management Systems organization, AECL is committed to studying and reducing the low impact of our operations on the environment. The estimated annual dose to those living within a 8-kilometre radius of CRL is equivalent to roughly 1/4 of the amount of radiation that you would receive during a medical x-ray (0.4 millisieverts or mSv), and is well-below the regulatory limit for the public set by the Canadian Nuclear Safety Commission (1 mSv/year).



*Actual figures for 2006 will be made available when all environmental data is collected and complete at the end of this year.



Continued from p1... Nominated by an anonymous external organization and selected by an independent group of community leaders, Mike Corrigan, Manager of Site Support Services, Jennifer Hein, Program Administrator and Al Stewart, Director of Site Maintenance accepted the award as the most recent School to Work Transition Program Leaders.



"Our School to Work Transition Program is one that allows the future of our industry to gain hands-on experience and to continue to learn," said Mike. "Our biggest reward is when we see a young student, especially a local one, come in on a co-op placement, graduate, complete an apprenticeship or graduate program, and then become part of the AECL team."

Over the years AECL has seen hundreds of young people participate in this program, with most of the credit for success going to the staff in the Manufacturing and Facilities Maintenance shops, for providing the opportunities and resources to work with the students.

Great catch from Perch Lake: Glass blocks recovered

Through the research carried out at the Chalk River and Whiteshell (Manitoba) Laboratories, Atomic Energy of Canada Limited (AECL) has become a world leader in nuclear waste management and environmental remediation.

Roughly 50 years ago a number of glass blocks were buried below the water table near Perch Lake on the Chalk River site to provide a means of monitoring groundwater contamination. One of the conditions imposed by the Canadian Nuclear Safety Commission (CNSC) during our site licence renewal last year, was that AECL remove them.

Any project in the nuclear industry must be carefully thought out and thoroughly examined before any "shovel hits the ground" to minimize any potential hazard to people or the environment. A work plan was prepared and sent to the CNSC outlining the steps to be taken to accomplish this work and the precautions that would be taken for the various hazards.

After a number of mock-ups, and extensive testing and training, the retrieval process was ready to begin. This involved lowering the water table in the vicinity of the glass block burial site and excavating the surrounding soil. The excavated soil was then placed on a sieve allowing the soil to fall through, and retaining only the blocks. The mesh was raised and the glass blocks rolled down a funnel and into a can that had been pre-placed in a shielded flask. The flask was then carefully sealed and then transported to a waste management area for safe, long-term storage.



It was a challenging task in less than ideal conditions but with strong support from the Radiation Protection staff, and diligence on everyone's part, the project was carried out quickly and efficiently with no contamination of personnel and radiation doses that were well below those that were predicted for this job.



PROJECTS & Accomplishments

"I've heard that the reactor in Chalk River doesn't produce power but makes medicine for cancer treatments instead. I thought nuclear reactors just produced electricity?"

You Asked Us...



Nuclear reactors can do a lot more than make electricity. They can test fuels and materials, increase the safety of jet engines, and create radioisotopes for nuclear medicine and cancer treatment, among many other things.

One of the most important activities at our National Research Universal (NRU) reactor is the production of radioisotopes for use in nuclear medicine; everything from heart monitoring and bone scans to "CAT" scans and life-saving cancer treatments. And, many advances in nuclear medicine were actually pioneered in Canada almost 50 years ago using the reactors at Chalk River!

More than 70,000 people each day all around the world are diagnosed and treated using radioisotopes from the NRU reactor. In fact, NRU produces almost half of the entire world's supply of medical isotopes.

So even though the reactors at Chalk River don't produce electricity, they do play a crucial role in saving and improving millions of lives each year around the world!

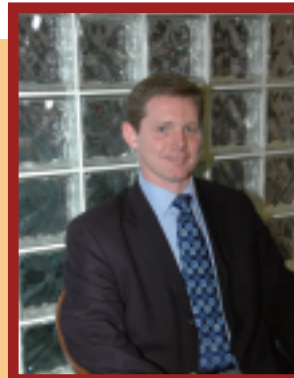
AECL employee honoured with NRCan award

Stephen Bushby, a long-time employee of Atomic Energy of Canada Limited (AECL) was honoured this past fall, with an Energy Sector Merit Award from Natural Resources Canada (NRCan). Bushby has been a key representative for Canada in the Generation IV International Forum (GIF). The driving force behind GIF is to collaboratively develop advanced nuclear reactor designs for deployment after ~ 2020.

Canada, led by Natural Resources Canada, was one of the founding members of GIF and chose AECL's Bushby to help establish the framework of the Canadian Generation IV program, and to determine Canada's contribution to the international effort. Bushby was seconded to Natural Resources Canada for over two years, and held a seat on the Policy Group, GIF's main governing body.

Ten countries signed a Charter in July 2001 (the European Commission signed in 2003) to identify areas where mutual interests could be fostered into multi-lateral, collaborative research and development projects. This was followed by the signing of an international treaty on Generation IV in February 2005 an accomplishment that Bushby takes a great deal of pride in.

Through expertise developed at AECL, Canada is considered a world authority on technologies associated with the Supercritical Water Cooled Reactor (SCWR) – one of the six concepts selected by GIF as a possibility for the future of the industry.



Town of Laurentian Hills recognizes AECL Fire Chief

For his ongoing community support, the Town of Laurentian Hills chose to recognize Rudy Cronk, Fire Chief of the Chalk River Laboratories (CRL). Since taking the reins as Chief several years ago, Rudy has generously made available the staff and equipment of the CRL Fire Department, most notably as part of the annual "Fire Prevention Week" held each fall.



"Rudy has been a big help to us from an education standpoint," explains Kevin Waito, Fire Chief, Town of Laurentian Hills. "But even more so, this award recognizes the level of cooperation that exists between the two departments. Many people don't realize but if there was a significant event, we know we can count on support from their department."

Pictured above from left to right: J.P. Letourneau, Senior Director, Nuclear Programs; Stephane Champagne, Fire Prevention Officer; Kevin Waito, Laurentian Hills Fire Chief; Rudy Cronk, AECL Fire Chief; Shannon Higgison, CRL Office Assistant; Mike Sandrelli, Deputy Fire Chief, Operations; Caroline Jacques, Operations Engineer Brian Kroes, Training Officer

Maple 1 reaches another milestone



The Canadian Nuclear Safety Commission (CNSC) has approved the operation of the MAPLE 1 reactor at powers up to 5 megawatts to perform the initial tests to re-measure the Power Coefficient of Reactivity (PCR).

In very simple terms, the PCR is a measure of how the core reactivity changes as power changes.

In 2003, commissioning of the MAPLE 1 reactor was stopped when test results indicated that the

PCR was slightly positive, rather than slightly negative as intended. AECL needed to find out why this was, and made a commitment to the CNSC to do just that. Since then, a team of AECL staff has worked to understand this issue and get the approvals required to move forward and resolve it.

Obtaining this approval was not an easy task. There were many CNSC meetings, several hearings, and plenty of discussion from experts in the subject, including external assistance from the Idaho National Labs, Brookhaven National Labs, and Argentina's INVAP to provide their insight though the entire process.

In addition, the Operations staff have spent over two years preparing the MAPLE 1 reactor for these PCR tests, first meeting all the requirements and before obtaining approval to take the reactor out of its guaranteed shutdown state to operate the reactor at low power.

We are pleased - and proud - to announce that the team's efforts culminated in January with the CNSC granting us the required approval to carry on. A big thanks to all the staff who have helped to support this project!



Turning over a new leaf

When Domtar Fine Paper, one of Cornwall Ontario's major employers, shut down operations in March of 2006 almost 1000 workers were laid off. In a town of only 50,000 residents, a layoff of that magnitude can make for an extremely tight labour market, forcing many of the former mill staff to look elsewhere for work.

News of AECL's large number of vacancies spread quickly amongst those left jobless, by word of mouth, and through the posted vacancies on the internet. In all, Chalk River Laboratories gained the expertise of six new hires as a result of the Cornwall closure: Gord Heward, Stan Zulinski and Barry Alguire, Instrumentation; Dwight Murray, Electrician; Dan Cadieux, Millwright; and Sean Fitzpatrick, Mechanical Specialist. And we are pleased to welcome them to our team.

It has often been said that when one door closes, another will open. And for these six from Cornwall, that is one cliché that does ring true.

CRL hockey tournament sends local girl to camp

The generosity of AECL staff seems to know no bounds. Recently the Chalk River Laboratories Security branch organized a charity hockey tournament, with the proceeds to send a local child to camp.

The CRL Security's Black Bears Hockey Club took the lead on the event, and the idea quickly became reality. "We had an overwhelming response, more people wanted to play than we could accommodate," says a Black Bears team representative. "We might have to consider expanding to 12 teams next year."



All proceeds from the tournament will go toward sending a 15-year old local girl to camp Merrywood, an Easter Seals camp near Smith's Falls. The teen is affected by a form of Cerebral Palsy, a disorder affecting body movement and muscle coordination.

Closing Note

Remember, we want to hear from you and welcome any questions or comments you may have. Whether by phone, email, fax or snail-mail, we value your opinions, and hope you'll get in touch.

Donna Roach

Manager, AECL Site and Community Affairs
Office: (613) 584-8282 or 1-800-364-6989
Cell: (613) 639-0441
Fax: (613) 584-8272
roachd@aecl.ca

Mailing Address

AECL Site and Community Affairs
Chalk River Laboratories
Chalk River, Ontario
K0J 1J0



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