

Neighbours

A proud part of the community since 1978

Fall/Winter 2006

We've taken the first step

OPG applies for site preparation licence for new nuclear reactors at the Darlington site



On September 22, 2006, Ontario Power Generation formally began the federal approvals process with the Canadian Nuclear Safety Commission (CNSC), for new nuclear units at the Darlington site. OPG has submitted an application for a Site Preparation Licence.

This follows the direction by the Ontario Minister of Energy in June of this year that we begin the federal approvals process for new nuclear units at an existing nuclear site.

in this issue

Preparing for the Future

pg. 2

World-Class Competitors

pg. 3

Station Performance

pg. 3

Children's Groundwater Festival

pg. 4

Safe and Secure at OPG

pg. 4

OPG believes Darlington is best-suited for new nuclear development because:

- There is room to build on the site;
- The site is adjacent to a major transmission corridor;
- Based on over 15 years of operating experience at the site, we understand the environmental impacts of operating reactors at Darlington, and those impacts are well within Canadian standards;
- The host community of Clarington and the Region of Durham are also very supportive; and
- We have a highly skilled workforce with many years of experience in operating nuclear units.

Continued on page 3



Preparing for the Future

Darlington Waste Management Facility construction progressing well



Construction of the new Darlington Waste Management Facility is well underway and expected to be operational in mid-2007.

For more than 40 years, Ontario Power Generation has been safely managing the waste from all of our nuclear generating stations. When used fuel bundles are removed from the reactor, they contain high fields of radiation and must be managed safely and responsibly. The used fuel bundles are contained in water-filled bays for up to 10 years to allow initial cooling.

As the Darlington fuel bays fill through normal station operation, it will be necessary to transfer used fuel bundles from the fuel bays into robust concrete and steel containers and place them in "dry" storage.

The term dry storage comes from the fact that the used fuel is stored in a dry state, contained and shielded by the concrete and steel of robust Dry Storage Containers (DSC).

The DSCs are engineered to last at least 50 years and will provide safe, interim storage until a long-term management program is in place. This dry storage process is a proven, safe and regulated technology that has been in use at the Pickering site since 1996 and the Bruce site since 2002. The Darlington facility is designed similar to the Bruce and Pickering facilities.

When the Darlington Waste Management Facility (DWMF) goes into operation in 2007, the first storage building will hold approximately 500 DSCs, each holding 384 used nuclear fuel bundles.

In addition to the construction of the Waste Management Facility, the Darlington station's used fuel bays are being modified to facilitate the loading of the used fuel bundles into the DSCs.

Just like our nuclear operating stations, OPG's waste management facilities are also licensed by the Canadian Nuclear Safety Commissions. How we manage our new and used fuel is closely monitored and regularly inspected by the International Atomic Energy Agency.

OPG has an obligation to plan for the eventual decommissioning of our nuclear facilities and the long-term management of nuclear waste from all 20 reactors in Ontario (located at Darlington, Pickering and Bruce sites). We believe it is important to ensure that future generations do not have to bear the cost of today's operations.

To ensure that money will be available when needed, OPG makes annual contributions into special segregated funds to pay for the long-term management of nuclear waste and station decommissioning. In compliance with government regulations, these funds may not be used for any other reasons.

The total future cost for the long-term management of nuclear waste from existing plants, and for their decommissioning, was about \$8.5 billion in present value dollars at the beginning of 2006. The segregated funds at this time were valued at approximately \$7.3 billion. OPG continues to make annual contributions of approximately \$450 million dollars.

For more information about Ontario Power Generation's nuclear waste program, please visit www.opg.com.



A message from Gregory Smith



This is a very exciting time for Ontario Power Generation and the Clarington community. As you read in our cover story, we have taken the first step and

are complying with the Minister of Energy's directive to begin the federal approvals process for new nuclear units at an existing site.

Although you may not realize it, you played a vital part in that important first step. It is our company's position that the best site for new nuclear build in Ontario is at Darlington. One of the reasons is the relationship we have with this community.

We are very proud to be a part of the Clarington community. The employees at Darlington understand and respect the relationship we have with you. We know it is a privilege not a right to operate our plant here. And we also understand that we must earn your trust every day in order to maintain that relationship.

Trust is an interesting emotion. We recognize and appreciate what you trust are our people. You trust us to make the right decisions by always putting safety first, following through on our commitments, doing the right thing, and maintaining open and transparent communications with you. We are committed to maintaining that trust.

We will keep you informed with regular updates and community information sessions as we move through the regulatory process. With approximately two-thirds of Darlington employees and their families living here in Durham Region, we are also committed to keeping our employees well informed so they can help their friends, families and neighbours understand our progress as well.

Important decisions will be made over the next few years about how the future electricity needs of the people of Ontario will be met. Right now, we have the opportunity to demonstrate what the employees of Darlington Nuclear are capable of - exceptional performance in the safe and reliable generation of electricity. It's all about performance. We can talk all we want - but our actions speak louder than anything we can possibly say.

You have played your part in helping to bring about our announcement, and now we will do our part too - by continuing to operate in a safe, reliable and cost-efficient manner.

Gregory Smith
Senior Vice President
Darlington Nuclear

World-Class Competitors



Members of OPG Nuclear's world-class emergency response staff are (left to right): Terry Dowdle, Darryll Styles, Brent Armstrong, Guy Towers and Bradford Soles.

OPG Emergency Response Staff Compete at World Championships

OPG Nuclear emergency response staff from the Darlington and Pickering nuclear stations put their fire-fighting skills to the test in September, as they competed at the 2006 Scott Firefit Championships. The four-day competition in Niagara Falls brought together over 300 competitors from across Canada and attracted thousands of spectators from all over the world.

The competition is a gruelling test of physical fitness; a course that tests the skills required for fire-fighting activities. The competition has been deemed the "Toughest Two Minutes in Sports." It is an event where fire-fighting professionals from across the country come together to compete in an atmosphere of support and friendship.

OPG is committed to providing high calibre emergency response capabilities at our

nuclear stations - and these capabilities are extended well beyond the property lines. Our well-trained emergency response employees have loaned their expertise by responding to fire and medical emergencies in our local communities. For instance, at a propane fire in Bowmanville in 2005, Darlington responded immediately by sending trained personnel and fire-fighting equipment, and continued to respond throughout the emergency situation.

In Niagara, both the Darlington and Pickering teams performed very well; in fact, both teams qualified for the World Championship competition.

OPG is very proud of our world-class emergency response employees and training program. Good luck to our Darlington and Pickering teams!

We've taken the first step *Continued from cover story*

Now that the license application has been submitted, the CNSC will review the application and determine the environmental assessment requirements.

The CNSC regulates the use of nuclear energy in Canada to protect health, safety, security and the environment. The CNSC describes five major steps in the licensing of a nuclear power plant. Before a company or applicant can undertake each step, it must obtain approval from the CNSC.

In addition, the Canadian Environmental Assessment Act stipulates that an Environmental Assessment (EA) must be carried out. The EA must demonstrate that the project is not likely to cause significant adverse environmental effects with available mitigation measures. If the decision on the EA is negative, the project will not proceed to the licensing process.

We will keep you informed and proactively seek your views at key stages of the regulatory process.

We welcome your questions or thoughts at any time. Send an e-mail to newbuild@opg.com or call us, toll-free, at 1-866-487-6006. For more information, visit our web site at www.opg.com/newbuild.

Performance Update

Darlington Unit 1 Maintenance Outage is Underway

Fall is a busy time at Darlington Nuclear. Our operating units continue to perform well and Unit 1 is currently shut down for a planned maintenance outage. Spring and fall - the "shoulder" seasons - are the best times for us to perform maintenance, when we traditionally see a lower demand for electricity.

Safety of the public and our employees is our primary focus. Darlington's employee safety performance is measured against other electricity companies. One measure is Accident Severity Rate (ASR), which means

the number of days lost due to injuries per 200,000 hours worked. In the third quarter of 2006, Darlington's ASR was higher than the top quartile Canadian Electricity Association performance due to one lost time accident: an employee who tripped and fell in a stairway.

In the four decades that nuclear energy has served Canada's energy needs, no member of the public has ever been harmed as a result of a radiation emission from a nuclear power plant or waste facility. We continuously monitor radiation levels at the perimeter of the station property. The estimated exposure during the second quarter of 2006 for people living near the station based on their lifestyle

characteristics and food consumption patterns, was 0.4 microsieverts. This is a very small percentage of the natural radiation we receive and much lower than regulated levels. In comparison, the natural radiation received from eating a banana is approximately twice this amount.

As of the end of October, our year-to-date net electrical production was slightly below target at 22.72 TWh. This is primarily due to an extended spring maintenance outage on Unit 3. Although our performance statistics may suffer, we made the correct choice to perform additional maintenance, as the long-term sustained health of the station and equipment is key.

Attendance tops 5,000 at Durham Children's Groundwater Festival

Are you a water steward? When was the last time you thought about water?

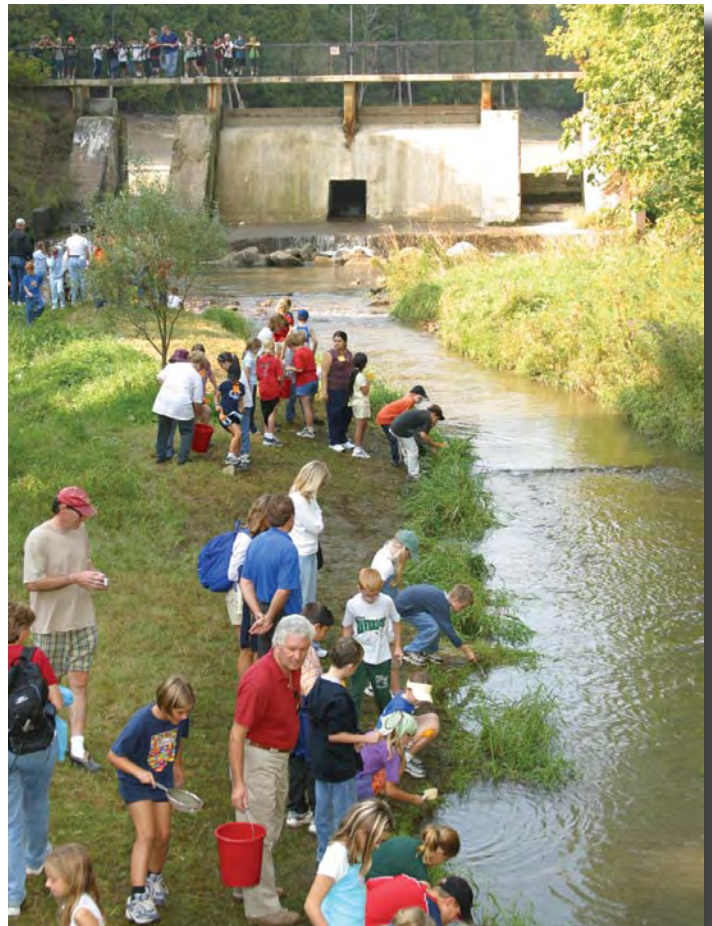
Chances are, if you know a grade four student in Durham Region they can teach you everything you need to know about water.

The United Nations Environment Program estimates that there are 14 million cubic kilometers of water on earth. It is in oceans, polar ice caps, rivers, lakes, fresh water aquifers, as well as, clouds and rainwater. In all of these bodies, water is continually moving through the cycle of evaporation, precipitation and runoff to the sea.

In September, more than 5,000 grade 4 students from across Durham Region learned how to become a water steward in their home, school and community at the ninth annual Durham Children's Groundwater Festival. Spending a full day at the festival held at Oshawa's Camp Samac, the students experience 40 hands-on educational activities focused on understanding and caring for our water systems. Local high school students conduct the activities – many of whom remember attending the festival when they were younger.

OPG is a proud community partner of the annual festival. Each year, employees from our Environment and Public Affairs Department play a lead role in organizing, preparing and delivering the festival, using a groundwater model to demonstrate how pollution can move through the various water tables and how it can impact our drinking water.

Darlington Public Affairs' Beverly Forget, and a member of the Durham Children's Groundwater organizing committee, said,



Grade 4 students from across Durham Region learn to be water stewards at the 9th annual Durham Children's Groundwater Festival.

"Water is such an important part of a healthy environment. This festival is interactive, fun and memorable. It teaches children to apply their knowledge in everyday life."

Safe and Secure at OPG's Nuclear Facilities

Over the past few years, Ontario Power Generation, under the guidelines of Canada's nuclear regulator, the Canadian Nuclear Safety Commission (CNSC), has introduced tough new standards for security at each of its power plants.

OPG has been in step with compliance and has taken a leadership role in the development of best-in-industry practices and programs.

Some of the improvements include:

- On-site Durham Regional Police Services providing 24/7 armed response;

- Robust security screening procedures, including explosives, X-ray, and metal detectors, along with geometric hand monitors for each entry into the protected area of the station;
- New state-of-the-art main and auxiliary buildings at both Pickering and Darlington nuclear stations;
- Comprehensive security clearance processes for each employee and contractor, and a process for renewal every five years or less and;

- Situational awareness training for supervisors and the mandatory wearing of photo ID.

In total, OPG has invested more than \$300 million in security upgrades in the last five years to ensure the station, our employees and the public are well protected.

"We're proud of all the work we have accomplished to date and continue to search out new and even safer methods of protection of the public and our assets," says Stan Harvey, Vice President of Nuclear Security at OPG.

Neighbours



Printed on 100% recycled paper.

Darlington Neighbours is published for the neighbours of Ontario Power Generation at Darlington Nuclear.

Mailing Address:
Ontario Power Generation
Darlington Nuclear
Box 4000
Bowmanville, Ontario
L1C 3Z8
www.opg.com

For more information contact:
Vanessa Hughes
(905) 623-6670 ext. 7443

Internet E-mail:
vanessa.hughes@opg.com

ONTARIO POWER
GENERATION