

Message from the President

Now or Never—Time to Talk New Build

The progress made to date regarding OPG's Darlington new build project is heartening for Canada's nuclear industry. However, given the stakes in play, our provincial and federal politicians should be doing more to advance the decision to build new CANDU 6 reactors.



During the summer, three reports were released highlighting the link between a clear energy strategy and economic development. Additionally, all three acknowledged that nuclear energy is important for both given the well documented economic, environmental and energy security benefits it can provide.

On July 16th, the Canadian Council of Chief Executives released their "Framing An Energy Strategy for Canada" submission to the Council of the Federation, comprised of provincial Premiers. Their submission noted that "we should be taking better advantage of the country's incredible array of energy resources...including uranium and nuclear to enhance their economic benefit to the country while supporting competitive Canadian industries and well-paying jobs."

Three days later, the Standing Senate Committee on Energy, the Environment and Natural Resources released a unanimous report, "*Now or Never*", outlining a vision for a low emissions economy. The committee developed 13 priorities from their three years of consultations with Canada's leading energy thinkers, federal, provincial and territorial representatives, research institutions, industry stakeholders, Aboriginal leaders, environmental groups and concerned citizens. "Maintaining support for Canada's nuclear industry" was one of them. The committee believes that "nuclear energy's capacity to produce large volumes of safe, reliable, emission-free electricity makes it an important element of Canada's efforts to reduce emissions."

In August, the Association of Power Producers of Ontario released a special feature in its IPPSO FACTO publication, "*Ontario's nuclear future: What is the state of play for Ontario's nuclear power industry.*" The article noted that since nuclear is the largest source of electricity in Ontario, the nuclear power industry and how it is handled by public agencies are serious issues with wide ranging consequences for

both Canadians and in particular Ontarians.

Unfortunately, as the article notes, nuclear energy and in particular nuclear power policy are not well understood by the public.

For us in the industry this means we must do even more to communicate the benefits of nuclear power to the public. It also means we have to let our elected officials know that their leadership and renewed support is needed. The Senate Committee's number 13 priority says it all—"Speak for Canada...The federal government must fulfill a leadership role in clearly, accurately and forcefully communicating Canada's energy story to the world." A good part of that should be about Canada's successful nuclear industry.



Cameco Continues Expansion

The affects of Fukushima and low uranium prices over the last year have caused some companies to sell their uranium assets or delay development projects, but not Cameco. The company appears to be looking ahead to the next decade when global uranium demand is expected to grow. India, China, South Korea and Russia all have plans to construct new nuclear power plants.

Last August, Cameco launched an unsuccessful \$500 million plus bid to acquire a Saskatchewan uranium company, Hathor Exploration. On May 15th, the company successfully acquired a uranium trading company, Nukem Energy GmbH from Advent International. Later in May, Cameco filed a preliminary prospectus to raise up to \$1 billion through a combination of securities.

In June, the company announced that it had increased its ownership in the Millennium Project in northern Saskatchewan with a \$150 million investment. Cameco did so by purchasing Areva Resources Canada Inc.'s 27.94 percent interest in the project. On August 27th, 2012, Cameco announced the purchase of the Yeelirrie uranium project in Western Australia from BHP Billiton Ltd, the world's largest diversified mining company.

Cameco plans to ramp up its production from the current 22 million pounds per year to 40 million pounds by 2018. Cameco is the world's largest producer of U308 uranium and the second-largest producer of uranium accounting for 20 percent of global production.

Quebec Election Decides Fate of Gentilly-2 Refurbishment

Politics continues to complicate Hydro Quebec's decision regarding the planned refurbishment of the Gentilly-2 Nuclear power plant. In March of 2011, Hydro Quebec indicated that it would be providing the provincial government with a cost benefit analysis of the closing of the plant. This is expected to be complete by December of this year.

The Parti Quebecois (PQ) entered the Quebec election campaign advocating the closure and decommissioning of the plant. As part of their platform, the PQ promised to create a diversification fund of \$200 million to help cushion the effects of closing the plant. Supporters of the PQ's position believe that refurbishing the plant will exceed \$2 billion; make power associated power exports to the U.S. unprofitable; that expected power output represents only 2 percent of the electricity production in Quebec; and that job loss numbers are overstated. As well, they believe decommissioning the plant will provide new marketable expertise for Quebec's nuclear engineers. In June 2011, the CNSC approved an amended operating licence for Gentilly-2 that allows Hydro Quebec to operate the facility until June 30th, 2016.

Having won the election, the PQ intends to proceed with its promise to close the Gentilly-2 nuclear plant. A spokesperson for the incoming premier Pauline Marois confirmed on Sept 11th that the plant would be closed. The decision came a day after the public screening of a film *Gentilly Or Not To Be* about the plant that raised questions about the safety of people living nearby. The regional public health director for the area surrounding the plant stated that there is no evidence the plant has contributed to higher rates of cancer.

One of the smaller groups involved in Quebec's election campaign, Quebec Solidaire, is openly critical of Premier Charest's "Plan Nord" to open up mining in the northern part of the province. The group sees it as a way to develop uranium mines in the area in spite of strong opposition from the people of Quebec.



Gentilly 2,
Courtesy of Hydro Québec

A Good Summer for OPG

On June 22, 2012 Ontario Power Generation (OPG) announced the signing of Services Agreements for New Nuclear with Westinghouse and SNC-Lavalin/Candu Energy Inc. The companies will have 12 months to prepare detailed construction plans, schedules and cost estimates for two nuclear reactors at Darlington. The provincial government will use the reports to help make the decision on whether to build new nuclear reactors at Darlington.

On July 4th, 2012, the CNSC gave OPG a six-month operating licence renewal for the Darlington Waste Management Facility (DWMF). The short-term renewal was requested for two reasons: the current operating licence expires on October 31, 2012; and the extension was needed while the CNSC considered OPG's application for a 10-year licence renewal for the DWMF and authorization to construct and operate more storage buildings for intermediate level radioactive waste and spent nuclear fuel. The Commission in November 2012 will hear this latter application.

On August 7th, 2012 the Joint Review Panel (JRP) of the CNSC announced that it was issuing a Nuclear Power Reactor Site Preparation Licence for OPG's Darlington Nuclear Power Plant Project. The JRP was satisfied that OPG had met the requirements of the Nuclear Safety and Control Act and is qualified to carry out the activities permitted under the licence. The JRP, established in 2009 to consider the environmental assessment and licence application to prepare the site considered OPG's submissions in support of the application, 264 intervenors and 14 government departments during a 17-day public hearing between March 21st and April 8th.

The JRP concluded that the project would not likely cause significant adverse environmental effects and submitted the environmental assessment report to the Government of Canada in August 2011. In May 2012, the Government agreed with the JRP's recommendation and authorized the project to proceed.

This is the first of three licences in the CNSC licensing process for new nuclear reactors. The public will have an opportunity in the next step of the regulatory process to comment on OPG's application to the CNSC to construct and application to operate a nuclear power plant.

Now or Never

On July 19th, 2012, The Standing Senate Committee on Energy, the Environment and Natural Resources released a unanimous report on Canada's energy future. The report outlines an energy vision for Canada with a goal of developing a low emissions economy. Over a three year period, the Committee drew on the expertise of more than 250 leading energy stakeholders across the country to gather insights into how Canada can leverage its natural resources, technology and human capital to enhance its role in the new world energy order.

The study produced 13 priorities for action to achieve long-term and affordable energy solutions. Maintaining strong support for Canada's nuclear industry was one of them. The Committee believes nuclear energy has an important role to play in Canada's energy future. The full report can be accessed at: www.senate-senat.ca/enev-e.asp

Bruce Power Keeps Achieving Milestones

Although this spring threw a few twists at Bruce Power, the company has been on an upward trajectory with its Bruce A refurbishment project since then. The return to service of Unit 2 experienced a set back in May due to a non-nuclear problem. An hour before the unit was to be synchronized to the grid, problems surfaced with an electrical generator that had been upgraded as part of the project.

The good news started rolling in for Bruce Power on July 20th with the CNSC announcement that the company could begin to power up its Unit 1 reactor. This enabled Bruce Power to complete final safety checks and prepare for synchronization to the grid following a shutdown of 15 years for the 750 MW unit.

On August 3rd, Bruce Power announced key operational milestones for the return to service of Bruce A Units 1 and 2 while continuing investments in Units 3 and 4. Unit 1 was critical and on track to deliver power in the third quarter of this year and Unit 2 was expected to be on line by the fourth quarter. The company also announced that it was undertaking an expanded outage investment program for Unit 4 that would extend its life by up to an additional 10 years.

On August 16th, the CNSC gave Bruce Power its strongest report card in the company's 11-year history. The company's performance was rated as "Fully Satisfactory", the highest rating for its security function and conventional health and safety. A "Satisfactory" rating was given for every other aspect of the site.

And finally for the second time this year, Bruce Power announced on August 21st that Unit 7 had set a new long-run record. Unit 7 set a new company record achieving on that day 452 days of safe, continuous energy production. Earlier in the summer Unit 4 also set a long-run record of over 570 days.



Unit 1 produces first steam in fifteen years on August 27, 2012, Courtesy of Bruce Power

Continued Progress for Point Lepreau Restart



Point Lepreau nuclear power plant, Courtesy of NB Power

Worth Repeating....

"The accident [Fukushima] may have faded from the international headlines, but it is essential that all of us - Member States, the IAEA and other key stakeholders - maintain our sense of urgency and our commitment to implementing the Action Plan in full. Much work remains to be done and we must not relax our guard."

*27 August 2012 | Vienna, Austria
Second Extraordinary Meeting of Contracting Parties to Convention on Nuclear Safety by IAEA Director General Yukiya Amano*

On August 28th, 2012, NB Power was given permission by the CNSC to begin increasing power at the Point Lepreau nuclear power plant. This will allow reactor power to increase above 0.1 percent but not produce electricity. NB Power will continue to perform a series of tests and verifications to ensure reactor components and plant systems are operating safely and reliably. Further CNSC regulatory approval will be required before NB Power can increase reactor power above 35 percent.

Station staff will perform a planned shutdown before final regulator approval is received. This will enable the removal of specialized equipment that has been used to start up reactors with new fuel and to complete any necessary adjustments or maintenance that may arise during turbine run up and testing. The reactor will then be restarted and the commissioning process

continued. NB Power expects the 660 megawatt (MW) station to be generating electricity in the fall of this year and expects the refurbished plant to do so for another 25 to 30 years.

The project is currently three years behind schedule and over budget by a billion dollars. New Brunswick's Premier David Alward continues to call on the federal government to cover the cost overruns. So far no such commitment has been made. Premier Alward has indicated that he will approach the federal government and AECL on the matter once the plant has returned to service.

In short...

High Cost of Going Green

Recent reports from Germany and Japan are highlighting the economic challenges both countries are facing as they switch from nuclear to more solar and wind generation. On August 28th, Germany's Environment Minister suggested the planned transformation may be slower than previously announced. The Minister noted in remarks to a renewables conference that "the faster the expansion of green power is, the more it costs". Germany is using above market rates to achieve a target of 35 percent renewables by 2020.

Vattenfall, a Swedish power company with assets in Germany, says the 150 billion euro transformation will see German consumers paying up to 30 percent more for their electricity by 2020.

Meanwhile, Japan's utility companies are claiming the cost of abandoning the country's 50 nuclear reactors may be too high. Japan's Agency for Natural Resources estimates that closing these reactors, which provide about a third of the country's electricity will cost 4.4 trillion yen (\$55.9 billion).

CNSC Responds to Editorial in Kingston and London Newspapers

Mr. Ramzi Jammal, Executive Vice President of the CNSC, set the record straight in a response to a University of Western Ontario professor's

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editorial published in July. The professor's guest editorial "Debate over possible nearby nuclear waste site buried" appeared in the Kingston Whig Standard and the London Free Press. Mr. Jammal's letter corrected some inaccurate and erroneous statements made in the editorial. He also emphasized that the CNSC is a quasi-judicial administrative tribunal that is independent from any political, government or private sector influence. The CNSC's response can be found at: www.nuclearsafety.gc.ca

Canada-China Nuclear Regulators Agreement

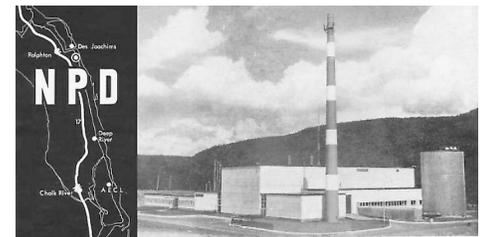


On July 27th the CNSC announced that they had signed a bilateral Administrative Agreement (Arrangement) with the China Atomic Energy Authority. This Arrangement is in accordance with a Protocol to the Agreement Between the Government of Canada and the Government of the People's Republic of China for Co-operation in the Peaceful Uses of Nuclear Energy of February of this year. Both the Protocol and Arrangement will allow for increased exports of uranium from Canada to China. Additionally, the Arrangement sets further measures directed at ensuring the peaceful use of any uranium exports authorized by the CNSC.

Milestone for Canadian Nuclear Industry

On June 4th, 1962, the 20 megawatt Rolphoton Nuclear Power Demonstration (NPD) reactor began delivering electricity to the Ontario grid. This event marked the 50th anniversary of nuclear power in Canada. NPD was the beginning of Canada's multi-billion dollar nuclear industry.

This successful project began with a partnership between Atomic Energy of Canada Ltd (AECL), Ontario Hydro, and Canadian General Electric in 1954. AECL's Chalk River Laboratories played a critical role in the success of NPD as well as Canada's continuing nuclear technology leadership. In addition to demonstrating the safe and reliable production of electricity, NPD has helped train generations of Canadian and international nuclear staff on the safe operations of CANDU nuclear power plants all over the world.



Nuclear Power Demonstration (NPD) Reactor, Courtesy of Canadian Nuclear Association and Canadian Nuclear Society and AECL

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The member groups are:

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