

## National Director's Message

### Speak to those who want your vote



Canada's nuclear industry will never be short of challenges.

One is the continual need to speak to those who will be influencing and/or making the decisions that determine the fate of our industry. I'm talking about the people who are already elected and those who will be standing for public office.

The CNWC, and others in our industry, have been proactively reaching out to engage these important players via face to face meetings and facility tours. Experience tells us these efforts work. In the coming months, we will have important opportunities to tell our nuclear story.

Although, there will not be another federal election until October, 2019, there are upcoming elections at the municipal and provincial level:

- Ontario provincial election – June 2018
- Ontario municipal elections – October 2018
- New Brunswick provincial election – September 2018

Nuclear energy is not the only issue our elected representatives will have to address. Reaching out and speaking to your current representatives as well as the candidates is critical for sustaining our environment, jobs and standard of living.



## CNWC News

- Bargaining discussions between USW Local 8914 McArthur River and Key Lake Saskatchewan and Cameco are expected to begin this fall. The existing agreement expires on Dec.31, 2017
- The Power Workers' Union will begin bargaining discussions with Bruce Power this fall. The existing agreement expires at the end of 2017.
- The CNWC's Annual Conference will be held October 14-17, 2017 in Peterborough, Ontario. This year's theme will be "The Nuclear Fuels Sector & Looking Ahead to the Future of Nuclear Power in Canada." Hosting Unions in the area include UNIFOR 599 & 524, IFPTE 164, USW 8562, 13173 and 14193.

## CNWC Policy Statement on Proposed CNSC REGDOC 2.2.4, *Fitness for Duty*

For the past six years, the CNWC and member unions have provided written and verbal comments and had face to face meetings with the CNSC on this proposed regulation. Some of our comments have resulted in revisions to the regulation; however, the version presented to the CNSC's Commissioners for approval on August 24, 2017 still contains the random drug and alcohol testing section.

If approved, licensees will be required to develop programs for random drug and alcohol testing at the NPP, CNL Chalk River and CNL Pinawa. Certified and Security staff will be covered by the program. The Licensee will determine which staff will be subject to testing.

The proposed regulation was an agenda item at the CNSC's August 16-17, 2017 hearing. The CNWC and representatives from the Society of Energy Professionals and Power Worker's discussed our concerns with the CNSC's President. The CNWC also distributed our Policy Statement on testing.

The CNWC and member unions support the intent of the Fitness for Duty regulation. However, the CNWC believes there are no workplace issues related to drug and alcohol at Canada's nuclear facilities and that existing rigorous systems already effectively address this matter. The CNWC's concerns will be discussed further at its annual meeting with the CNSC now scheduled for November. The Policy Statement can be found at [www.cnwc-cctn.ca](http://www.cnwc-cctn.ca).

## Cameco Builds Community Support

Cameco announced the signing of a Collaboration Agreement with the Lac La Ronge Indian Band, the largest First Nation in Saskatchewan, on June 19, 2017. The Agreement enhances an existing 30 year plus relationship and commercial ventures in support of Cameco's mining operations in northern Saskatchewan.

The Agreement addresses workforce and business development, community engagement and environmental stewardship and community investment and will remain in effect until the closure of the last of Cameco's existing operations in northern Saskatchewan.

Cameco's annual polling of Port Hope residents in June showed 86% of residents support the continuation of Cameco's Port Hope operations. Eighty seven percent believe Cameco's "Vision in Motion" plan for the Port Hope conversion facility is moving in the right direction and is a benefit to the community.

The company reported its Second Quarter Results on July 27th. Cameco has settled the tax dispute with the U.S. Internal Revenue Service and noted the continuing difficult market conditions, including a weaker outlook for 2017 compared to 2016. Cameco also referenced underway actions to reduce costs and strengthen the company's long-term prospects.

On August 21, 2017, the company released an update of its Sustainable Development Report. Highlights referenced: a continued focus on local spending with 70% procured from local suppliers and, continued high levels of public support in locations where the company operates.

## Bruce Power Keeps Focus on Relationships

On June 30th, Bruce Power celebrated Canada's 150th birthday by supporting 150 CANADA 150 events around the region. Earlier in the year the company had donated over \$70,000 to various local organizations for these events.

Bruce Power reported on July 19 that its President and CEO, Mike Rencheck, had joined the Advisory Council for Holtec International. This Council of international experts will provide advice and direction as Holtec develops its SMR-160 small modular reactor design. Earlier in July, Holtec International and SNC-Lavalin signed a teaming agreement to develop the reactor.

Bruce Power launched a \$100,000 Community Safety Fund on the first day of August during a visit by Ontario's Minister of Community Safety and Correctional Services. The funds will be invested in community safety initiatives between 2018 and 2020.

Five days later, the company announced its continuing commitment to a partnership with the Saugeen Ojibway Nation involving the expansion of the "Leaders in Training" program. Together with the communities of Saugeen and Chippewas of Nawash Unceded First Nations, the company renewed its commitment to help develop future Indigenous leaders locally. The company is contributing \$50,000 annually to be shared equally by the two communities.

On August 8, 2017 Bruce Power and AREVA NP expanded their agreement for the commercialization of radioisotope production. The companies will further explore opportunities to commercialize radioisotope production capabilities at the Bruce nuclear facility for beneficial uses in the health care industry. Bruce Power will use AREVA NP's patent-pending method of production to produce shorter half-life radioisotopes with little impact on normal reactor operations.

The company announced on August 15, 2017 that in conjunction with its partners, \$165,000 had been raised from Bruce Power's annual Charity Golf Tournament. The funds will benefit the Kincardine and Community Health Care Foundation and the Saugeen Memorial Hospital Foundation.



*Jim Barbour, left, Chair of Saugeen Memorial Hospital Foundation, and Becky Fair, President of the Kincardine and Community Health Care Foundation, accept a \$165,000 donation from Jeff Phelps, Bruce Power's Vice President, Major Projects, and Peggy Zeppieri, Physican Recruitment, during Bruce Power's 16th annual Charity Golf Tournament. Nearly \$2 million has been raised for the foundations over the past 16 years. Courtesy of Bruce Power*

## What Others Are Saying

"...Energy is the engine of development and prosperity. All countries—both developed and developing—need to secure sufficient energy to drive economic growth, while working to mitigate the effects of climate change.

Nuclear power helps to address both of these challenges. It is one of the lowest-carbon technologies for generating electricity. Today, nuclear power produces 11 percent of the world's electricity. But when it comes to low-carbon electricity, nuclear generates almost one third of the global total.

Nuclear power plants produce virtually no greenhouse gas emissions or air pollutants during their operation, and very low emissions over their entire life cycle. The use of nuclear power reduces carbon dioxide emissions by about 2 gigatonnes a year. That is the equivalent of taking more than 400 million cars off the road every year..."

*Source: Statement of the Director General, International Atomic Energy Agency, August 28, 2017*

## Worth Repeating

### “The Path to 2050

Industry developed its vision in the Nuclear Leadership Forum since 2012.

Deep decarbonization studies establish the case for much more nuclear.

Now we need government to work with us to:

- Grow Canadian excellence in sustaining safe reactor life
- Review policies and regulations to support advanced designs/applications
- Resume new reactor build in Canada—because without, we cannot stay at the global leaders’ table, nor maintain our base of skills and suppliers
- Market Canadian reactor technology globally
- Market VSMR design with Canadian content globally—because the only possible customer for realizing the benefits of VSMRs in Canada’s remote, northern and Indigenous communities is government, with its responsibility for energy and emissions in these regions.
- Nuclear may be challenged to obtain and maintain social license unless Canadians hear government asserting the positive role for nuclear in a low carbon economy
- Government must lead Canadians more quickly toward pragmatic, not dogmatic, views of the climate challenge—including where GHG emissions really come from, how they can be realistically reduced on a large scale, and how much change this implies.
- Canada’s nuclear energy sector does not have the resources to communicate to tens of millions of Canadians. Only government can better counter myths and misunderstandings that slow the public’s embracing realistic paths forward.”

*Source: Canadian Nuclear Associations presentation to the Hon. J. Carr, Minister of Natural Resources Canada, August 2, 2017*

## Good News for Point Lepreau

On June 15, NB Power announced that the CNSC had granted the company’s Point Lepreau Nuclear Generating Station (PLNGS) a five-year operating licence. The existing Power Reactor Operating Licence would have expired on June 30, 2017. The CNSC staff assessed the licence application and confirmed that the safety measures in place at PLNGS meet the regulatory requirements of the *Nuclear Safety and Control Act* and associated regulations. The CNSC also confirmed that the necessary safety measures and equipment are in place to protect the public, employees, and the environment. The decision followed a two-part public hearing process in Ottawa and Saint John. About 94 intervenors provided written submissions at the May Part 2 hearing in Saint John.

On July 5, NB Power announced that the capacity factor for the PLNGS for the month of June was 99.57 percent with its production representing about 72 percent of the company’s net generation. On August 4, the company announced that PLNGS was temporarily taken off-line due to an electrical equipment issue. The station was back online on August 7 and NB Power reported that it had achieved a capacity factor of 99.7 for the month of July. In an August 16 release, the company noted that the 2016 CNSC assessment of 14 safety and control areas for the plant, 12 were *Satisfactory* and two *Fully Satisfactory*.

## OPG: On Schedule and Budget

OPG’s Second Quarter Financial Results were released on August 11, 2017. The report highlighted strong performance at the Pickering Nuclear Plant and the “on schedule and on budget” Darlington Refurbishment Project. The Pickering Station produced 1.2 terawatt hours more compared to 2016 and unit capability factor increased to 84.2 percent and 81.4 percent for the three and six month periods ended June 30, 2017.

Second quarter results showed an expected year-over-year decline in generation revenue, due to the lower nuclear generation, without the resetting of base regulated prices, ensuing from the refurb outage for Darlington’s Unit 2. The release noted that OPG provides electricity at a price 40 percent lower than other generators and that it is the only generator in Ontario that has its prices set through a public hearing process. A decision from Ontario’s Energy Board on OPG’s current application that will set prices on OPG’s nuclear and most of its hydroelectric generation for the next five year is pending.

On August 16, OPG announced that the CNSC had awarded the Darlington and Pickering nuclear stations its highest safety ratings. The Darlington Station has achieved this rating for eight consecutive years and the Pickering Station for two years in a row. On the last day of the month, the company released its Q2 report on the Darlington Refurbishment Project. Ninety-six percent of the related expenditures are occurring in Ontario. The report indicated that over 5,000 workers were on site with an additional 500 expected in September.

The company reported on September 1, that it had safely shut down Unit 1 at the Pickering Station for a planned outage involving a \$77.3 million investment in maintenance and inspection projects. This is the third planned outage at the Station, following the successfully completed outages for Unit 4 and 5 earlier this year.



*Darlington Refurbishment Project,  
Courtesy of OPG*

## In short...

### CNL Open House Celebrates Canadian Science and Technology

On August 12, 2017, more than 2,000 visitors visited the Canadian Nuclear Laboratories' Open House at Chalk River. The event celebrated the more than six decades of scientific accomplishments in clean energy, health, safety, security and environmental stewardship achieved by AECL and CNL employees—past and present.

Visitors had the opportunity to view scientific demonstrations, exhibits and presentations, tour the world-class laboratories, engage in hands on activities and much more. Hundreds of AECL and CNL volunteers were on hand for the event. On August 30, CNL celebrated sixty years of operations of the National Research Universal (NRU) reactor.

### Canadian Leadership in Advanced Nuclear Energy Cluster

On July 26, 2017, Canada's nuclear industry leaders announced the submission of a Letter of Intent application to Innovation, Science and Economic Development Canada (IESD). The proposal to create a Canadian Leadership in Advanced Nuclear Energy Supercluster (CLEAN) was made in response to an open call for expressions of interest from industry-led consortia to participate in IESD's \$950 million Innovation SuperCluster Initiative.

CLEAN's four developer participants include: Terrestrial Energy, Moltex Energy, SNC Lavalin Nuclear, and Advanced Reactor Concepts. Other participants include the CNA, OCNI, CNL, Hatch, Promatom, Integra,

UOIT and McMaster Universities, and provincial power companies, including OPG and SaskPower. Many other players in Canada's nuclear industry are expected to participate at the Full Application stage. All parties want to ensure Canada has a place as a world leader providing timely solutions to the clean energy challenge.

### U.S. Nuclear Considered Crucial for Security

Energy Futures Initiatives, a think tank established by former Energy Secretary Moniz, released a report ([www.energyfuturesinitiative.org](http://www.energyfuturesinitiative.org)) on August 16, 2017 stressing the important role U.S. nuclear power plays in national security.

The report calls for the federal government to provide more resources to support nuclear new build projects. These include: credit support, tax incentives, federal siting agreements and power purchase agreements. Over 700 companies in 44 states provide direct support for the industry, with the top supply chain companies located in Pennsylvania, California, Texas, Illinois and Ohio.

### Nuclear Power and Hurricane Harvey

The title of a September 1, *Forbes* article by James Conca reads "*Hurricane Harvey Makes The Case For Nuclear Power*". Texas experienced historic flooding, refinery shutdowns, chemical explosions and interrupted wind and solar generation when the Hurricane made landfall.

Yet, as the author notes, Texas nuclear plants continued to run smoothly. A two-reactor power plant near Houston continued to operate at full capacity despite wind gusts that peaked at 130 mph. The South Texas Project has steel-

reinforced concrete containment built to withstand any category hurricane or tornado. Built 29 feet above sea level, the plant is designed with watertight buildings and doors.

### Finland Supports Nuclear Power

In the middle of June 2017, a Finnish polling company released survey results indicating an upward trend in support for nuclear power. On September 1, 2017, the head of Finland's Energy department announced the government would be introducing legislation early next year to phase out coal. Two new reactors anticipated to come online in 2018 and 2024 are expected to take the place of coal.

About 10% of Finland's electricity is provided by coal generation with 66% of the required fuel coming from Russia. Currently, nuclear power generates about 30% of Finland's needs, which will grow to 60% with the completion of the two new reactors.

### Twenty Floating Reactors for China

On August 11, 2017, China National Nuclear Power announced its plans to build 20 floating nuclear power plants in the South China Sea. Floating vessels, mass-produced in Shanghai shipyards, will use small modular reactors to supply electricity, heat and desalination to islands and coastal areas or to offshore oil and gas platforms. The cost of the electricity from these 60 MW reactors is estimated at \$135/MWh U.S. at about half the cost of diesel-fired generation.

China General Nuclear began construction of the first floating power plant last November. A 140 MW SMR is being developed for use on land.

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The Canadian Nuclear Workers Council is an organization of workers represented by unions working in various areas of the Canadian nuclear industry which includes uranium mining, nuclear fuel processing, nuclear power stations, radio isotope production for medical and industrial purposes, and nuclear research.

The member groups are:  
District Labour Councils (Grey/Bruce, Durham, Northumberland) • International Association of Firefighters (160) • International Association of Machinists & Aerospace Workers (608) • International Brotherhood of Electrical Workers (37) • Power Workers' Union • Professional Institute of The Public Service of Canada • Society of Energy Professionals Union • Society of Professional Engineers and Associates • UNIFOR (The Union for Canada) (S-48, O-599, & O-252) • United Steel Workers (14193, 13173, 8562, 8914, 7806 & 1568) • International Federation of Professional & Technical Engineers Union • Provincial Building and Construction Trades Council of Ontario • International Union of Operating Engineers