

FALL 2017

From THE Point

STATION NEWS
FOR THE COMMUNITY

**Regulatory Oversight Report for
Canadian Nuclear Power Plants: 2016**

Enriching the Lives of Local Students:

The PLNGS and Fundy Shores School Partnership



Énergie NB Power

A CAREER FUELLED BY A PASSION FOR LEARNING



Leah Belding, a Licensed Control Room Operator, who is training to be a Shift Supervisor.

LOCAL YOUTH TRANSFORMS INTO NUCLEAR PROFESSIONAL

Standing in the Main Control Room at the Point Lepreau Nuclear Generating Station (PLNGS) for the first time was a career defining moment for Leah Belding. At the time she was only 19, fresh out of high school, and working at the plant on a short-term contract in the Service Maintenance Department.

“It was a real ‘wow’ moment to see these nuclear professionals working in a room with hundreds of buttons and switches, and knowing that they were operating a nuclear power plant,” Leah said. “That is the moment that I knew I wanted to be part of the team that operates Point Lepreau.”

Leah was raised in the area, and calls the local community of Chance Harbour home, which is approximately 10 minutes from the

Station. Upon graduating from high school, with family members, friends and neighbours who worked at the plant, she knew Point Lepreau was a good employer with diverse career opportunities.

During her initial six-month contract, Leah developed relationships with co-workers who became mentors and helped her learn about the career possibilities in the different departments.

“Getting an inside look at the roles that keep a nuclear power plant running was a great learning opportunity,” said Leah. “These conversations with staff helped me decide that I wanted my future to be at Point Lepreau, and specifically as part of the Operations team, which lines up with my love of hands on, dynamic work.”

Leah then enrolled in the Power Engineering Technology Program at the New Brunswick Community College (NBCC). Upon completion of the first year of the program, Leah joined the Point Lepreau team again, this time as a Power Engineering summer student. She was assigned to one of the Operations crews for her CO-OP program. This experience gave her a glimpse of what full-time employment would entail, the challenges of working shift work, and the day-to-day activities the Operators perform, such as applying work permits, general routines, alarm response needs from the Control Room Operators, and more.

Upon graduation from NBCC, Leah was hired as a Power Plant Operator (PPO), and took nuclear-specific plant training, along with radiation

protection training, to give her a strong foundation to work at PLNGS. Two years into that role, she had the opportunity to become a Senior Power Plant Operator (SPPO) by completing additional training. In these roles, Leah performed field inspections and operational tests, among other activities, to ensure plant reliability.

Two years later, Leah was selected to become a licensed Control Room Operator (CRO), which she had set as her ultimate career goal.

A CRO is a position of leadership amongst the staff who are licensed by the Canadian Nuclear Safety Commission (CNSC) to operate

a CRO was very rigorous, and included a lot of self-directed reading and studying before we got to the hands-on learning,” Leah said. “In the midst of this program, I had my first child, and balanced my family and work commitments to keep my progress on track. I had tremendous support from my family and community, as well as my colleagues, who rallied behind me to help me achieve this important career goal.”

Leah spent the next nine years working on shift as a CRO, with her “thumb on the pulse of the plant.”

“I love the fast-paced work environment and team approach

public and the environment. The Shift Supervisor makes operational decisions, and prioritizes the work to be done. They also lead the response to any potential abnormal plant conditions or emergency situations.

“It is a tremendous honour to train to be a Shift Supervisor,” said Leah. “I have spent 40% of my 16 years with NB Power taking formal training either in a classroom or a simulator, focusing on not only plant operation, but also the personal aspects of operator fundamentals – not just what to do, but how to do it to the high standards required and expected of staff.”

Leah recently completed the simulator phase of her training, and is set to begin co-piloting before the end of the year. For approximately 40 shifts, she will work under the direct supervision of a Certified Shift Supervisor who will retain all authority to operate and monitor the plant. After 40 co-piloting shifts with a senior mentor, the applications for her certification will be submitted to the CNSC.

Leah and her husband Nathan live in Chance Harbor with their three children, Austin, Owen and Kelsey, close to where they both grew up. Their family ties run deep over many generations with connections to both PLNGS and the fishing industry. These links guarantee that Leah does not take the responsibilities of the Shift Supervisor role lightly.

“When I talk about ensuring the safety of the public and the area surrounding the Station, I am talking about my husband, children, siblings, nieces, nephews, parents, aunts, uncles and friends, and the places we call home,” she said. “I am talking about my husband and our family members who are local fishermen providing fresh, safe food for the people throughout New Brunswick and beyond. It is my commitment to operate PLNGS in a safe manner every single day to protect the communities around us.”

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- Leah Belding, Licensed Control Room Operator

the plant. A CRO is responsible for monitoring the status of systems or components, interpreting and responding appropriately to instrumentation, verifying the work of team members, and configuring the plant to allow specialized maintenance and testing to be performed. A CRO also plays a key role in plant emergencies and any events involving personnel safety.

The three-year CRO training program was challenging, with a year of general training, a year of station-specific training and another year of simulator training, where candidates train to respond to unlikely hypothetical emergency scenarios at the Station. This was followed by six months of co-piloting where Leah worked alongside a licensed operator in the plant to gain experience. Leah achieved certification as a CRO at the age of 29, just 10 years after setting her sights on the occupation. “The training program to become

for Operations,” she said. “Being in the middle of everything and providing leadership and direction to the larger team is exciting and rewarding. Every shift I am relied upon to make important decisions based on what I have learned, to ensure the safety and reliability of the plant.”

In September 2016, Leah was once again recognized for her skills and leadership abilities. This time she was selected as a candidate to train to become a certified Shift Supervisor.

The Shift Supervisor role at PLNGS is the most senior role on shift in the Operations group. The Duty Shift Supervisor is responsible for ensuring the plant is operated within Point Lepreau’s Operating Policies and Principles, and the Power Reactor Operating Licence granted by the CNSC. Ultimately, they are responsible for maintaining nuclear safety to protect staff, the

REGULATORY OVERSIGHT REPORT FOR CANADIAN NUCLEAR POWER PLANTS: 2016



Every year, the Canadian Nuclear Safety Commission (CNSC) staff produce a report on the safety performance of Canada's nuclear power plants. The Regulatory Oversight Report for Canadian Nuclear Power Plants assesses how well plant operators are meeting regulatory requirements and program expectations in Safety and Control Areas such as human performance, radiation and environmental protection, emergency management and fire protection.

The 2016 report highlights the nuclear power industry's safety performance during 2016

and details the progress of compliance and regulatory issues up to April 2017.

Through site inspections, reviews and assessments, CNSC staff concluded that PLNGS, and all other nuclear power plants in Canada, operated safely in 2016. They also determined that the plants made adequate provisions for the protection of the health, safety and security of persons and the environment from the use of nuclear energy.

Point Lepreau's integrated plant rating was Satisfactory, on par with the industry average

for operating nuclear plants in Canada. Of the 14 safety and control areas assessed by the CNSC, PLNGS received 12 Satisfactory ratings and two Fully Satisfactory ratings, for Conventional Health and Safety and Safety Analysis.

On August 16, 2017, employees from PLNGS participated in a public CNSC meeting in Ottawa where the 2016 report was discussed.

"We value the feedback provided in this annual report from our regulator," said Michael Hare, Station Director. "Point Lepreau's

Satisfactory integrated plant rating demonstrates that we operate safely and effectively within the rigorous requirements of CNSC regulations.”

The PLNGS team is proud of its safety record, having achieved more than 6.5 million person-hours worked without a lost time accident. As industry experience has shown that the best performing plants in the world are the safest plants in the world, Station staff work in a culture of prevention in which safety is the starting point for how all work and activities are planned and executed.

“While we currently meet or exceed all regulatory standards, we are focused on continuously improving our performance,” said Michael. “Looking ahead, an integrated Fully Satisfactory rating and top quartile performance are clear targets for the Point Lepreau team.”

SAFETY AND CONTROL AREA	PLNGS RATING
Management system	Satisfactory
Human performance management	Satisfactory
Operating performance	Satisfactory
Safety analysis	Fully Satisfactory
Physical design	Satisfactory
Fitness for service	Satisfactory
Radiation protection	Satisfactory
Conventional health and safety	Fully Satisfactory
Environmental protection	Satisfactory
Emergency management and fire protection	Satisfactory
Waste management	Satisfactory
Security	Satisfactory
Safeguards and non-proliferation	Satisfactory
Packaging and transport	Satisfactory

“ Point Lepreau’s Satisfactory integrated plant rating demonstrates that we operate safely and effectively within the rigorous requirements of CNSC regulations. ”
 - Michael Hare, Station Director

FISHERIES ACT AUTHORIZATION APPLICATION

At the public CNSC meeting on August 16, NB Power provided an update on a number of topics, including plans to apply for a Fisheries Act Authorization.

Due to legislative changes by Fisheries and Oceans Canada (DFO), NB Power is required to apply for a Fisheries Act Authorization. NB Power is working with DFO and the CNSC to prepare the application, which involves community engagement with First Nations individuals and communities, local fishing industry representatives and the PLNGS Community Relations Liaison Committee.

There have been no changes to operations at PLNGS to

trigger this federal authorization requirement. Recent studies on marine organisms in the Bay of Fundy confirm earlier studies that Station operations do not cause significant harm to fish populations or to commercial, recreational or Aboriginal fisheries.

PUBLIC DISCLOSURE PROTOCOL - ACTION FROM LICENCE DECISION

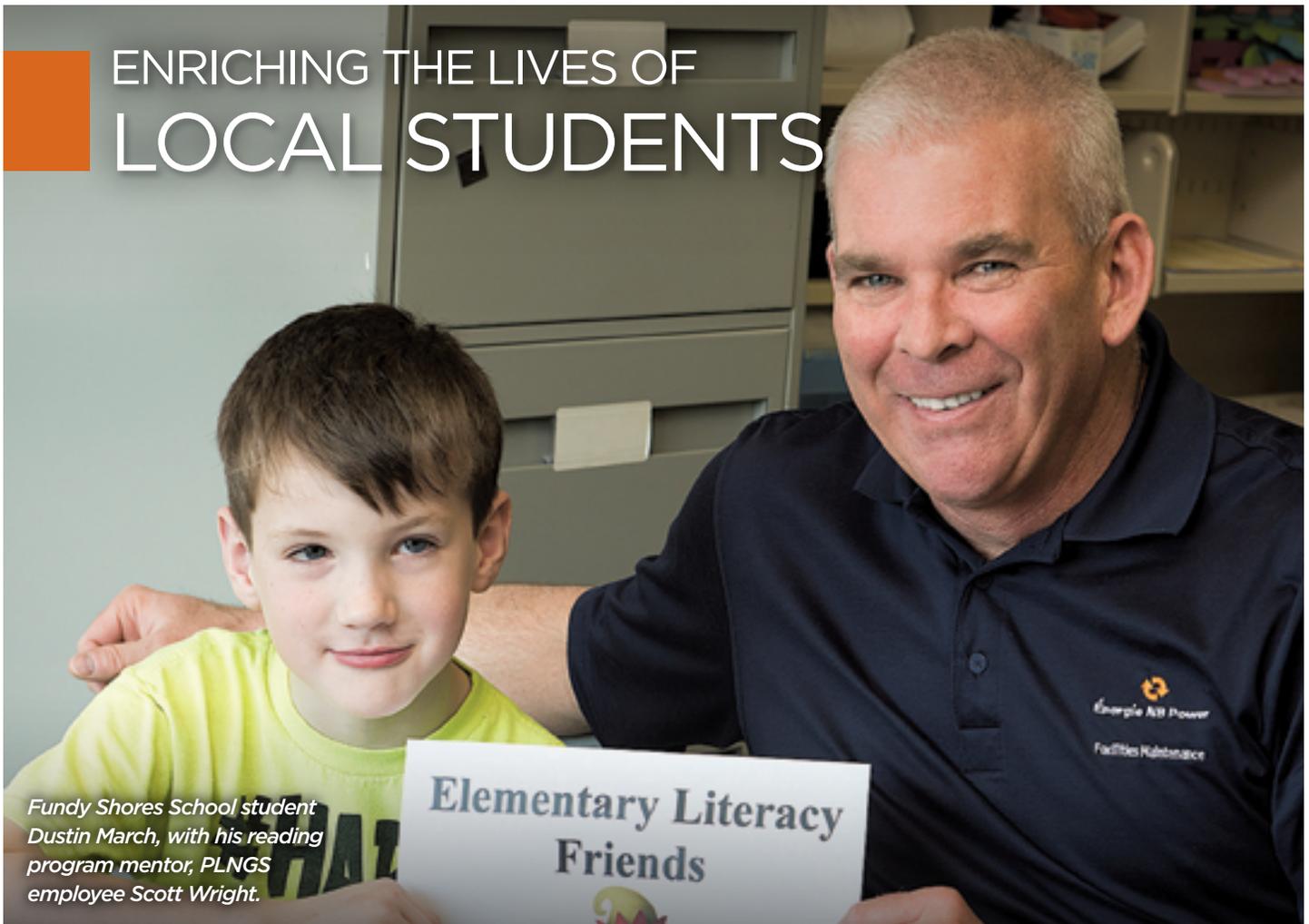
In its Summary Record of Decision, the Canadian Nuclear Safety Commission directed NB Power to make Point Lepreau’s Technical Planning Basis – Radiation Emergency publicly available.

This document is a technical basis for radiological emergencies and serves as a planning tool to support the development of sound and effective emergency response plans and associated capabilities.

The document was posted on www.nbpower.com in August 2017, and can be accessed in the Safety section of the website, under Nuclear Safety – Safe and Prepared.

The current planning basis document was developed in 2003 by International Safety Research (ISR), and this company is currently updating the basis for PLNGS to consider changes to codes and standards. PLNGS is updating the basis in collaboration with the New Brunswick Emergency Measures Organization (NB-EMO) and plans to issue the new version in 2018.

ENRICHING THE LIVES OF LOCAL STUDENTS



Fundy Shores School student Dustin March, with his reading program mentor, PLNGS employee Scott Wright.

THE PLNGS AND FUNDY SHORES SCHOOL PARTNERSHIP

Over the span of its operating life, Point Lepreau has fostered a strong relationship with Fundy Shores School, the rural K-5 school located only a few minutes from the plant in Dipper Harbour.

The majority of the 80 students at this close-knit school know someone who works at the Station, whether it's a parent, relative or neighbour. The plant plays a key role in the community, so it's important for staff to give back by supporting the development of the next generation of New Brunswickers.

Longstanding annual events with students include planting of a marigold garden at the Station and an environmental awareness and clean-up event.

Sylvia Dell'Olio has been a teacher at Fundy Shores School for 16 years, and serves as the school representative on the PLNGS Community Relations Liaison Committee. She has seen the benefits of the partnership with Point Lepreau first-hand.

"PLNGS has built an alliance with our school that has made a difference to the students and staff," said Sylvia. "In all the ways that the plant is a part of our every day school life, it has made a real difference in the lives and the education of our students.

Our students can witness firsthand the opportunities for careers in this industry, they've been encouraged by the staff to pursue goals and further education. Our student body knows that PLNGS is cheering for them and supporting them as they reach for their goals."

Point Lepreau added a new element to this partnership In January 2017, when the Station became an Elementary Literacy Friends (ELF) partner. ELF is a volunteer-based reading program for Grade 2 students at Anglophone schools across New Brunswick.

“ Station staff continually demonstrate what good citizenship is because they genuinely care about the communities around their facility. ”

- Sylvia Dell'Olio, Fundy Shores School teacher

The program involves community volunteers being paired up with Grade 2 students to provide additional time focused on reading to support literacy skills. Volunteers spend two hours per week reading with the students, for a 10-week term. To learn more about ELF, visit www.elfnb.com.

Kathleen Duguay, Manager of Community Affairs and Nuclear Regulatory Protocol, worked with the Fundy Shores School Principal, Sean Gorman, to establish the program as another way for the Station to engage with students.

“Reading is a gift I believe every child should have,” said Kathleen. “Investing in literacy at a young age will give these students the confidence and encouragement they need to excel – in school and in life.”

The first term of the program involved eight PLNGS employees volunteering twice per week during their lunch-hour break. The first term was completed in April 2017, and concluded with a celebration event that involved tears from many of the students and volunteers.

“In conjunction with the Elementary Literacy Foundation, we have been very fortunate to partner with the employees of Point Lepreau in implementing the ELF Program at Fundy Shores School,” Sean said. “I have been pleased with the positive

impact these adult mentors have had on the students. The children have grown significantly both in confidence and in their lifelong love of reading. The ELF program is without a doubt a favourite part of the week for our Grade 2 students.”

In the spring, the PLNGS Reading Program volunteers were recognized for their contributions at an appreciation event for ELF volunteers across the province in Saint John. They were also honoured at the Peter Gzowski Literacy Dinner in Fredericton, where they received the Literacy Coalition of New Brunswick’s first-ever President’s Award because the program “exemplifies what literacy is really all about in New Brunswick.” With this award, the Coalition recognizes a special individual or organization that has gone out of its way to give the gift of literacy to the people of New Brunswick.

Linda Mitchell was a PLNGS reading program volunteer in the spring. She recently retired from PLNGS after a 26-year career, and lives in the local community of Little Lepreau. She says the experience was something she will always cherish.

“I feel so proud to be part of such a great team and to have worked for a company that supports these types of community programs,” said Linda. “It was about more than helping the students improve their reading skills – we formed friendships and really

connected. Knowing I’ve had such a positive impact on my student’s love of reading and their overall education experience is something I take a lot of pride in.”

Scott Wright has worked at NB Power for 31 years and lives in the community of Maces Bay. He was very proud to participate in the first term of the PLNGS Reading Program.

“We all felt great knowing what an impact we had on the children’s love of reading,” Scott said. “I think it’s safe to say it was an experience that none of the volunteers or students will ever forget.”

The second term of the ELF reading program will take place this fall. Fundy Shores School staff have been very supportive of Point Lepreau engaging in the children’s learning. It is an honour for NB Power to be a part of the community.

Sylvia says that the Station is a tremendous asset to the school, community and province as a whole.

“We cannot thank PLNGS enough for the sincere care and involvement with our children and the well-being and success of our students and our school,” Sylvia said. “Station staff continually demonstrate what good citizenship is because they genuinely care about the communities around their facility.”



Sherry Thorne, Trent Martin, Kayly Lomax, Brett Plummer and Dustin King plant marigolds at the PLNGS main gate as part of an annual tradition.

COMMUNITY ENGAGEMENT



Participants included: (from left) Bill Boutin, Susan Foreman, Cathy Shea, Mary Murphy, Whitney Matheson, Mary Anne Rowlands, Doug Rowlands, Brian Chambers, Maggie Boutin, Doug Ballantyne, Wanda Ballantyne, Joey Baird, Maxine Crawford, Maxine Card, Theresa Taylor, Lillian Kennedy and Bradley Lomax.

FUNDY BAY 50+ CLUB CREATIVE ARTS

On June 20, approximately 20 people, including residents of the local community and members of the Fundy Bay 50+ Club, participated in a Creative Arts program which was held at the lighthouse near the end of the Lepreau Peninsula on the PLNGS site.

The Creative Arts Program with the Fundy Bay 50+ Club began two years ago as a partnership between the Club and the Charlotte County Activity Centre as a social and artistic mingling opportunity.

“The creative process allows the cares of the day to melt into the background as we concentrate on the work at hand,” said Mary Anne Rowlands, Creative Arts Coordinator. “For many people, this helps to improve mental health and overall well-being.”

The event offered community members with artistic expertise the chance to use the beautiful coastal location for inspiration. Participants



Teresa Taylor paints a water colour scene of the PLNGS lighthouse.

created art through painting, sketching, photography and sculpture, and enjoyed the company of one another while enjoying the natural surroundings. Everyone enjoyed the experience and created unique pieces of art during the visit.

The afternoon event was a special treat for the members, some of which had never been to the plant, or hadn't been for many years due to security restrictions.

“Thank you so much to Point Lepreau for allowing us to visit and ensuring we had a great day at the lighthouse,” said Mary Anne. “Station staff were friendly and

professional, and we felt very welcome. It means a lot to our community that the plant is so supportive of the community and our interests. We can't wait to come back next summer.”

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