

WINTER 2018

From THE Point

STATION NEWS
FOR THE COMMUNITY

Introducing our new
Station Director

Point Lepreau employee recognized
with national lifesaving award



Énergie NB Power

INTRODUCING OUR NEW STATION DIRECTOR

PROMOTING EXCELLENCE THROUGH EMPLOYEE ENGAGEMENT



On December 1, 2017, Mark Power was appointed Station Director at Point Lepreau. Mark has worked at the Station in roles of increasing responsibility for more than 25 years. His diverse background and unique experience has built the foundation for strong leadership as a champion for continuous improvement.

In 1981, Mark began his career with NB Power as a summer student at the Grand Lake Plant. He began fulltime employment as an Operator at Coleson Cove Generating Station in 1987, following completion of the Power Engineering Technology program at New Brunswick Community College. He then completed a Bachelor of Science in Mechanical Engineering, with a special focus in nuclear, at the University of New Brunswick in Fredericton.

Mark joined NB Power's Nuclear Division in 1992 as a Power Plant Operator (PPO). He then became a Control Room Operator (CRO) before going on to become a certified Shift Supervisor (SS). Mark then spent a decade in management positions leading departments such as Performance Improvement, Fuel Handling, Outage Work Management and Production. He recently served as Station Manager in preparation for his new assignment as Station Director.

Q. What aspects of your career have prepared you to be Station Director?

A. I'm fortunate to have worked in the majority of the departments at Point Lepreau during my career, right from my entry level Operator position when I joined the team in 1992. This has given me the unique perspective to be able to help our workers solve wide ranging issues and act upon opportunities to improve the Station from one end of the organization to the other.

My experience working on shift as a PPO, CRO and SS has helped me to understand the complex systems that allow us to safely generate electricity, while ensuring the protection of

the public, the environment and our workers. I take pride in knowing the inside of the Station very well and how all of the complex systems interact with each other, and look forward to helping others achieve their professional goals in the coming years.

NB Power very much supports the development of its leaders, and I've had the opportunity to visit more than a dozen nuclear power plants around the world to develop a clear understanding of what excellence looks like. I've participated in technical support missions and peer reviews through the World Association of Nuclear Operations and the Institute of Nuclear Power Operations, and in 2016, had the privilege of

participating in an International Senior Nuclear Plant Manager course.

Q. What are you most looking forward to in your new role?

A. As Station Director, I plan to continue working alongside our staff to engage each and every employee. By having everyone in our Point Lepreau team understanding their role and contribution to the bigger picture and improvement initiatives, we'll be able to continue achieving our operational goals while on our journey to excellence.

We have a tremendously hardworking, capable and dedicated workforce; actually, they are our biggest asset at

PLNGS. Our 900 employees and the refurbished Plant are the reason we are able to generate safe and reliable power for all of our customers. Everyone has a role to play, and together, we are operating a world-class nuclear power plant in a way we should be very proud of.

There's a great sense of satisfaction and fulfillment that comes from knowing your hard work and efforts have paid off, and that each employee's contributions make a real difference. We see this firsthand as our Station's performance continues to improve. I hope to help all our workers achieve that same level of job satisfaction and engagement.

I've always been a champion for employee safety, having served for years as the Joint Health and Safety Committee Co-Chair for Management. I look forward to working with staff to reinforce positive safety behaviours to ensure we continue to accept only the highest standards. Our team recently achieved over 7 million person-hours without a Lost Time Accident. We are extremely proud of our safety record, but there are always ways to raise the bar and to continuously improve.

Q. How did your childhood shape your career?

A. From a young age, I aspired to run a power plant for NB Power. My father, Goldwyn Power, spent his whole career working at NB Power, and in the later years, he managed the Grand Lake, Chatham and Dalhousie generating stations. Like many young boys, I looked up to my father and I saw this as a challenging career choice to provide for my family. In the last part of his career, my father assisted with the construction of Point Lepreau. The excitement he shared with me about this new energy solution for the province left a lasting impression on me, and drove my curiosity about nuclear power.

Growing up in Minto, I have strong roots in the province. So, when the opportunity to work at the provincial utility came up, I was excited to be able to stay in my home province to pursue my career of choice. This allowed me to give back to the province which had provided me with many opportunities and a very good upbringing.

Q. Coming from a small town, how important is it for NB Power to maintain the community's trust?

A. We would not be able to continue operating if we didn't have the support of the communities surrounding the Station. Our relationship with those who live and work near PLNGS is built on trust and respect, and has only grown stronger since the Plant was commissioned. Building strong relationships is fundamental.

Building positive, respectful relationships with First Nations people and communities is very important to us and we are committed to maintaining and growing those relationships. We value their insight and their input and we seek to understand their diverse perspectives. I look forward to our quarterly Community Relations Liaison Committee meetings, because there we have an opportunity to not only share what's new at the Plant, but learn about the lives and any concerns of those living near our workplace. This community has embraced nuclear power through Point Lepreau support, and with it, have embraced our presence in their backyard. That isn't something that happens overnight, and it's something that we at the Station take great pride in and continue to work very hard to maintain.

For me, it's about respecting our social licence to operate. That means extending our rigorous safety standards beyond the Plant site. You will always see me respect the traffic rules on Route 790, and insist that our employees and contract staff do the same because it's a sacred thing to respect the safety of the people who call this area their home. I speak for all of our staff when I say that safety and protecting the people and environment around the Station is our top priority.

Q. Speaking of the environment, how significant is Point Lepreau in terms of NB Power minimizing the environmental footprint required to generate electricity for its customers?

A. Due to the reliable nature of nuclear power, PLNGS is considered a baseload plant. This means that unless we're down for maintenance, we continuously supply in excess of 660

megawatts of power to the New Brunswick grid. That represents about one-third of our customer demand in-province, so as a non-greenhouse gas emitting plant, we play a vital role in helping to meet climate change action plan objectives. The operation of Point Lepreau also enhances NB Power's flexibility to utilize and explore renewable options in the decarbonizing economy.

When people ask me how I know Lepreau is not harmful to the environment, I always tell them about the Monarch butterflies. Our site is a recognized waystation for Monarch Watch, which means that it's a natural stop on their migration path. They choose to feed and reproduce at our site because of the pristine, undisturbed nature. Knowing our rigorous environmental program and that the Monarchs are choosing our site as an important resting spot on their migratory route, we can feel good about our environmental stewardship of the site.

We take our responsibility of protecting the environment very seriously and have maintained a registered ISO 14001 Environmental Management System for the past 15 years. This past fall, we were the first nuclear plant in Canada to achieve the 2015 version of the ISO standard, which sets the bar even higher for environmental performance.

Q. When you aren't at the Plant, what are your top priorities?

A. I'm a very family-focused person. I've been married to my wife Nancy for 25 years, and we have raised four wonderful daughters in the community of Rothesay. Our free time centers around spending time together, whether it involves the wide variety of outdoor activities we enjoy, such as hiking, camping, gardening or traveling and attending sporting events as a family.

Editors' Note: The previous Station Director, Michael Hare, has been promoted to Deputy Chief Nuclear Officer, leading external strategic initiatives for the Station.



EYES AND EARS ON THE WATER

POINT LEPREAU GIVES AN EARLY MORNING THANK YOU GIFT TO A SPECIAL PART OF ITS COMMUNITY



Opening day of lobster season at the Dipper Harbour Wharf.

On the Bay of Fundy, opening day of fishing season is a mixture of stress and excitement. Weeks of planning on trapping strategies are set in motion in the second week of November as crews gear up for that first sail out to sea.

For this year's opening on November 15, in the wee hours of the morning before even the fishers had arrived

at the Dipper Harbour Wharf, a few people were already there, preparing a special surprise.

Point Lepreau Nuclear Generating Station's (PLNGS) Security and Emergency Services departments, along with Ron Mawhinney, member of the Plant's Community Relations Liaison Committee, and Kathleen Duguay, Manager, Community Affairs

and Nuclear Regulatory Protocol, were setting up to greet the fishers with morning refreshments and words of thanks for their work as Point Lepreau's "eyes and ears on the water."

"Point Lepreau has its own security, but the fishers provide additional eyes and ears on the water for us," said Trent Martin, Manager of

Security and Emergency Services at the Plant. "The Bay of Fundy is their community. They know everything about those waters and they know immediately whether there are unfamiliar vessels or anything else that seems not quite business as usual. Over the years, we have developed a good working relationship, and they'll call in to us if something seems amiss."

"Approximately 75 per cent of the area bordering the Station is the Bay of Fundy, which is the commercial fishing industry's workplace," said Ron. "We are always concerned about what is happening here environmentally. Since the first regulated fishery in this area around the 1880s until present, the water quality of the Bay has remained strong. The relationship between

the 3:30 a.m. pit stop at Tim Horton's to "pick up the goods" for the meet and greet.

The team set up a trailer and had coffee, juice, donuts and muffins ready when the first fishers arrived before sun up.

"We wanted to give a huge thank you to the lobster industry and the reaction went beyond our expectations. It really meant a lot to the fishers that the Station did this," said Ron, recounting how even a week later he was stopped while shopping in a Saint John store by a fisherman who just wanted to say thanks again.

"The community surrounding Point Lepreau is a tremendous strength for the Plant," said Kathleen. "We are incredibly fortunate and grateful to have strong community partnerships with the fishing community. Their continued support helps our employees generate safe, clean electricity at Point Lepreau that benefits everyone."

“ We wanted to give a huge thank you to the lobster industry... ”
- Ron Mawhinney

Increasingly sophisticated surveillance equipment on fishing boats means the fishers "know exactly what's going on in the water," says Ron, whose own career in the fishing industry and relationship with PLNGS goes back even before the Plant was built.

the Plant and the fishers is one of mutual interest."

In his role on the Community Relations Liaison Committee, Ron planned the early morning surprise with the Station staff. When the day arrived, he made



Bradley Small - Captain & President of Fundy North Fishermen's Association, Wayne Janes - Captain, and Ron Mawhinney - member of the PLNGS Community Relations Liaison Committee.



AN UPDATE ON MARINE ENVIRONMENT PROTECTION SURROUNDING THE STATION

For as long as Point Lepreau has been part of the community, we have been taking care to be good stewards of the water, land, plants and animals in the environment surrounding the Station.

We do this through various initiatives:

- the design and safe operations of our Plant;
- monitoring of the environment on an ongoing basis to ensure no significant effects; and
- through the relationships we build with community partners to ensure we understand the expectations and interests of those who are counting on us.

Design

Our environmental commitment began with the original Plant design, a collaborative effort that included input from leading experts of the time, including relevant federal government agencies. As technological updates have occurred through the years, we have worked to incorporate them into our existing systems for continuous improvement. In fact, one system designed to reduce potential harm to marine biology – the condenser cooling water system (CCW) – has been recognized as the “best available technology” for mitigating effects on the marine environment.

Monitoring

In 1978, Point Lepreau worked with the Bedford Institute of Oceanography (part of Fisheries and Oceans Canada) to establish the Environmental Monitoring Program (EMP). The program assesses the environment for impact of any radioactive releases from our Station. For more than 25 years, we have conducted numerous studies. The 2016 results from the EMP surrounding the PLNGS facility demonstrate that there are no negative health impacts to the public or negative environmental impacts.

As well, we study other potential impacts and seek to identify corrective measures, if needed. From 2014 to 2016, NB Power conducted studies on the entrainment (capture



Protecting the Bay of Fundy and the environment around our Station is important to the people who work at Point Lepreau.

of small organisms into the cooling water flow) and impingement (unintentional capture of marine life that swim into the screens of the Station’s pump houses). The studies confirmed earlier research that indicated the CCW system does not cause significant harm to fish populations or to commercial, recreational or Aboriginal fisheries.

Engagement, Consultation and Partnership

In July 2017, our regulator, the Canadian Nuclear Safety Commission, indicated a new requirement for NB Power to apply for a Fisheries Act Authorization in keeping with the updated Fisheries Act. The authorization process involves consultation and engagement with First Nations communities as well as local fishing and interest groups. NB Power has begun the engagement process with various groups, all of whom we already work with on other initiatives, including First Nations communities, Fishery Associations, the PLNGS Community Relations Liaison Committee, the Fundy Bay keeper and the Conservation Council of New Brunswick.

As well, NB Power continues to meet with the CNSC and the Department

of Fisheries and Oceans Canada to understand requirements of the Act and the Station’s responsibilities.

Engagement and consultation are continuing; should further measures be required to further offset or address fish impingement or entrainment, NB Power has begun the process of identifying options including local area initiatives that support commercial, recreational and Aboriginal fisheries. NB Power is coordinating this work with the full engagement of Fisheries and Oceans Canada and the Canadian Nuclear Safety Commission (CNSC).

NB Power is also committed to additional thermal plume monitoring in order to update the previous studies and to include the results in future ecological risk assessment. This initial work and planning has commenced and will continue in 2018. NB Power is coordinating this work with full engagement of the CNSC and Environment and Climate Change Canada.

Protecting the Bay of Fundy and the environment around our Station is important to the people who work at Point Lepreau; because when we aren’t on the job as employees, we are Station neighbours too.

PREPARING FOR A SUCCESSFUL MAINTENANCE OUTAGE



Sarah Titus and Terry Matheson of the Radiation Protection Department, provide support to the outage team to ensure radiological safety is maintained during all tasks.

“ Our maintenance outages allow us to execute key work that enhances the Plant’s reliability and predictability. ”

- Wayne Woodworth,
PLNGS Outage Manager

A strong focus is put on how the jobs, many of which are infrequently performed, will be carried out safely and with quality. Preventing safety incidents is our top priority to ensure all workers make it home safely at the end of each day.

This outage is part of the PLNGS multi-year planned maintenance strategy with an increased focus on improving equipment reliability. The next planned maintenance outage will take place in April 2019.

“Our maintenance outages allow us to execute key work that enhances the Plant’s reliability and predictability,” said Wayne Woodworth, PLNGS Outage Manager. “By following a comprehensive and systematic plan for maintaining our valuable asset, we’ll ensure that PLNGS runs safely and reliably for another 25 to 30 years. We will continue to provide emission-free, baseload power for the province that our customers can count on.”

The Station’s planned maintenance outage for 2018 is scheduled to begin on April 6, 2018. The target duration is currently projected to be approximately five to six weeks, with more than 10,000 activities expected to be completed.

There are a wide variety of jobs being planned for equipment and systems on both the nuclear and conventional parts of the Plant. Planned activities include routine maintenance, repairs, system modifications, inspections and testing that can only be conducted when the unit is offline.

This year’s outage is categorized as an Even-East outage, meaning that we’ll primarily be working on the Even electrical bus, and the Primary Heat Transport (PHT) system will be open to support work on the East side of the reactor.

We have a team dedicated to preparing for effective outages, but it takes all workers to set up the Station for success. Many staff temporarily step into different roles to support outage activities, and we bring in NB Power employees from other facilities along with contractors to temporarily supplement our workforce.



POINT LEPREAU EMPLOYEE RECOGNIZED WITH NATIONAL LIFESAVING AWARD



Keith Whitebone receives a CEA Lifesaving Award from Francis Bradley, Chief Operating Officer of CEA.

“ I would give my life for a complete stranger. ”
- Keith Whitebone

This past November, the Canadian Electricity Association (CEA) recognized and celebrated incredible lifesaving acts at its annual Lifesaving Awards Reception in Toronto.

For 2017, they recognized the heroic actions of fifteen employees from utilities across Canada. Introduced in 1922, the Lifesaving Awards recognize employees of CEA members whose actions helped save a life, or prevented further harm to someone in need.

Keith Whitebone, a Supply Maintainer at Point Lepreau Nuclear Generating Station (PLNGS) who resides in Dipper Harbour, was one of the award recipients.

On an ordinary drive to work in September 2016, Keith became a hero to a woman who had been in a car accident.

Coming up on Route 790, out of the corner of his eye, Keith spotted a car on its roof in the ditch, water coming

up its side. He quickly pulled over to the shoulder and jumped into action.

“Some sort of calm came over me and I just did what had to be done,” said Keith. Searching for something to help, Keith found a large rock that he used to break the back window of the car. He crawled inside. Once in the overturned car, he found a woman trapped upside down by her seatbelt.

“I did think, when I got down to this lady hanging upside down in anywhere from inches to three feet of water, this poor soul survives this terrible roll over and now she has the potential of drowning,” said Keith. “I wasn’t going to let that happen.”

He was able to cut her free from her seatbelt, and carefully helped her out of the car through the back window. Once out of the car, Keith sat by her side on the swampy ground and helped to keep her calm and comfortable while they waited for emergency responders to arrive. His actions prevented a potentially tragic outcome.

Keith was nominated for a Safety Recognition Award by the PLNGS Joint Health and Safety Committee and the Corporate NB Power Health and Safety Team submitted his name for the CEA Lifesaving Award.

“Recognition is appreciated but not needed,” Keith said. “I would give my life for a complete stranger.”



Happy New Year

Best wishes in 2018 to you and your family from the entire team at PLNGS

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