

BRUCE POWER

takes Business Continuity to a new level

By Vickie Gougoulis

Ontario businesses and residences rely on Bruce Power for 30% of our electricity. As the world's largest operating nuclear power facility, located in Ontario, I was interested in how they planned for disasters. I had the excellent opportunity to speak with Dan McArthur a Senior Strategist with Bruce Power and Emergency Preparedness Technical Chair for the International CNS Conference on Fire Safety and Emergency Preparedness in the Nuclear Industry. Since 2012, Bruce Power has undergone significant enhancement in emergency response and management and Dan was the Manager of the department responsible for implementation of significant program enhancement.

WHAT IS THE RISK OF FIRE AT BRUCE POWER?

Nuclear is very procedurally driven, safety is always #1. The potential for fire is very low, but just because it is low, doesn't mean we don't prepare. We prepare for all hazards.

There are various degrees of fire that can be prepared for, and in different locations. Bruce Power constructed a new fire training facility in 2015. We mock up different types of fires: fuel or electrical for example, on various apparatus in our new facility. We use an interoperability approach with our exercises through working with many external organizations, and have an enhanced program to practice fire response and also command and control of any type of crisis situation.

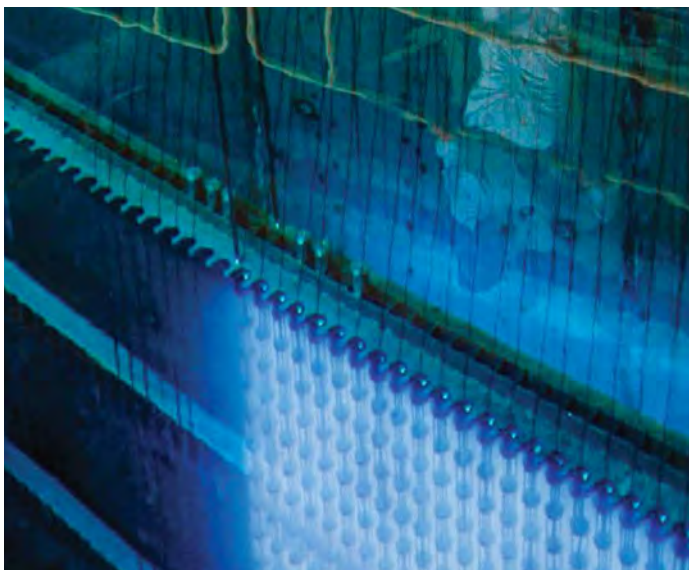
Our Emergency response organization is located on our 2300 acres site. Some nuclear facilities use community fire and security but Bruce Power is remote so we have our own 24/7 capability. The Emergency and Protective Services team undergoes hours of training each year so they are well prepared for anything related to medical, fire or security. With over 300 person emergency services organization including fire, security and emergency services personnel, they provide first response capabilities to the site of over 4000 employees.

WHAT ELEMENTS OF YOUR CRISIS MANAGEMENT PLAN ARE UNIQUE?

Our Crisis Management plan involves our executive team in a more integrated approach and as a means to recovery operations. In some instances, the team can become engaged when the crisis is not our own, but the industry's as was the example when Fukushima occurred. During that event, we stood up our Crisis Management plan and our CEO explained the events that were happening, and the impacts to the public. Even though there was no crisis at our site, we played an important role to help explain and provide support.

Secondly, Bruce Power has a continual focus on emergency response and we constantly seek to enhance our program. In the event of full scale infrastructure outage, Bruce Power can operate regardless if power is available or telephone lines are down.

Our Communication System has been designed to be disaster proof. We have primary communication feeds, and we have VSAT Technology to maintain internet, phone and off-site remote environmental monitoring system which we share the data with Health Canada. We also have a notification software system for emergency responders. Our system has four layers: we have our own radio communications on site, with efforts in place to extend



and allow us to communicate off-site beyond 30 km so we may communicate with the communities of the Town of Saugeen Shores and the Municipality of Kincardine, and our alternate facilities. Lastly we have Alert FMs, where

we are able to send alert and text messages via radio stations sub carrier system. We hand out receivers for these types of communications to Category A employees. These are key employees with whom it is crucial to maintain communication.

To summarize, we are similar to that of a small town. We are set-up to maintain on-site operations regardless of what weather or disaster is happening. However, we work closely with outside agencies to ensure continued interoperability each year. We also maintain emergency material agreements and mutual aid agreements to ensure we are as secure and robust as possible.

DESCRIBE YOUR EMERGENCY MANAGEMENT CENTRE

Our Emergency Management Centre is in place to manage a response. Everyone that comes on site undergoes significant safety training. Bruce Power continually trains selected staff that play a role within our command structure and response organizations who could play a role in any event. We practice regularly and continually each year.

We also involve external stakeholders. Once every year Bruce Power practices with external OFMEM (Ontario Fire Marshall and Emergency Management). One every three years we have a large corporate exercise. The last one we conducted had approximately 60 agencies involved. This allows us to practice interoperability to effectively work together. We also practice at least twice a year with the community.

With news coverage of natural disasters, threats and points of weakness in infrastructure, it is hard to escape the concern that we are all susceptible to disaster. Thankfully, Dan's account of the planning and ongoing efforts for continuous improvements at Bruce Power makes me feel a lot safer that a major source of Ontario's energy has looked at risks and taken every effort to plan to meet and mitigate them.

For more information on events at nuclear facilities, visit the Canadian Nuclear Safety Commission <http://nuclearsafety.gc.ca/eng/acts-and-regulations/event-reports-for-major-nuclear-facilities/event-reporting/nuclear-power-plants.cfm>

A warm thank you to Dan McArthur for this interview. ■