

Community Liaison Committee Meeting Record

Meeting Date: September 22, 2020

BWXT: Natalie Cutler, Director, Communications & Government Relations
Jon Lundy, VP Strategy and Business Services
Dave Snopek, Director, EHS & Regulatory Affairs
Kathleen Augustin, Communications & Community Relations Specialist

CLC Members: J. Backler, R. Church, N. Martin-Burtart, C. McCoy, J. Wickenden,
P. Feinstein, D. McNee.

Absent: None.

Guests: Chris Critch, Sr. Director, Strategic Supply, BWXT Isotope Technologies

ACTION ITEMS

Action Item	Responsible	Status / Notes
1. Review option to have someone from medical isotope division be a guest speaker at upcoming meeting	N. Cutler	Closed
2. Share job posting for dedicated communications specialist to CLC when posted.	N. Cutler	Closed
3. Share infographics with CLC.	N. Cutler and K. Augustin	Ongoing
4. Review providing information to the local sporting organizations / clubs and retirement / senior homes.	N. Cutler and K. Augustin	Open
5. Share virtual meeting / telephone town hall agenda with the CLC prior to meeting.	N. Cutler and K. Augustin	Closed
6. Share 2020 survey details with CLC.	N. Cutler and K. Augustin	Closed
7. Review door-do-door approach and plan with CLC.	N. Cutler and K. Augustin	On Hold - COVID-19
8. CLC to review BWXT NEC's current website and provide feedback.	CLC Members	Open
9. Share social media plans with CLC.	N. Cutler and K. Augustin	Closed
10. Share revised Terms of Reference with CLC for 2021	K. Augustin	Open
11. Send ROR details to CLC	K. Augustin	Open
12. Discuss safety scenarios (specifically hydrogen tank and rail line) at next CLC meeting	D. Snopek	Open
13. Provide feedback on newsletters and website FAQ.	CLC Members	Open
14. Share BWXT's medical isotope video link with CLC.	K. Augustin	Closed
15. Include more guest speakers in CLC meetings.	N. Cutler and K. Augustin	Ongoing

DISCUSSION NOTES

Due to the COVID-19 pandemic, the meeting was held virtually. The meeting began with a roundtable of introductions, overview of the agenda and a safety moment.

Natalie Cutler introduced Chris Critch to the CLC, highlighting that Chris is the Sr. Director, Strategic Supply at BWXT Isotope Technologies in Kanata, Ontario. Natalie explained that Chris joined BWXT in 2018 when the medical isotope division of Nordion, a Sotera Health company was acquired. Chris has been with Nordion/BWXT for 32 years and he is a specialist in the development and manufacturing of nuclear medicine products for patients around the world.

Chris began by explaining that in 2018, BWXT announced it had developed an innovative new way to produce the medical isotope Technetium-99m (Tc-99m), which is used in over 40 million nuclear medicine procedures each year. He stated that approximately one third of all hospital patients rely on nuclear medicine for their diagnosis or cure and that Tc-99m is a necessary diagnostic tool. He pointed to an illustration noting all of the major organ systems imaged with Tc-99m-based radiopharmaceuticals including the brain, heart, liver, stomach, kidney and more. Chris then reviewed a flow chart highlighting the traditional process to get Tc-99m compared to the new BWXT process. Chris explained that this man-made isotope has a half-life of six hours. He compared it to a flashlight where the battery can't be turned off and after six hours of use, half of the power is gone. Chris then noted that the majority of medical isotopes supplied by BWXT today are produced in cyclotrons at BWXT's Vancouver facility on the TRIUMF campus of University of British Columbia. He continued on to state that the Molybdenum metal will be irradiated in a nuclear reactor to become Mo-99 (which decays into Tc-99m) and will be processed at our Ottawa medical isotope facility and shipped in Tc-99m generators to hospitals across North America. Jon Lundy also noted that this is the first time a company is using a power reactor to make medical isotopes. A CLC member asked for more information about a cyclotron and Chris explained that it doesn't require uranium and that a beam generator accelerates hydrogen particles which impacts the target and creates the isotopes. Another CLC member asked what the risk was to employees and the public with this process in Ottawa. Chris explained that BWXT is making medicine to treat patients and that doses are very low. He noted that the facility is configured with safety systems to protect employees from getting a medical dose. Chris also mentioned that at a power reactor, the process would be done through an automated system which puts the targets in and out of the unused ports of the reactor. He explained that there are special containers and packaging used and that they are licensed by the Canadian Nuclear Safety Commission (CNSC). The CLC and BWXT representatives thanked Chris for his presentation.

Next, Natalie reviewed the action items from the previous meeting, noting that many of the action items were covered in this meeting. She marked the following items as complete: BWXT NEC to have someone from the medical isotope division be a guest speaker, BWXT NEC to remind CLC about co-chair role, BWXT NEC to share updated terms with CLC, and BWXT NEC

to share virtual event details, social media plan and survey details with CLC. Natalie noted that door-to-door outreach is currently on hold due to COVID-19 and that BWXT NEC is still reviewing providing information to sporting organizations, clubs and retirement homes. The CLC is still actioned to review the www.nec.bwxt.com website and provide feedback.

Next, Natalie outlined recent CLC updates. She began by highlighting that the CLC terms of reference document will be reviewed and modified to be more flexible for participants and once this revision is ready that it will be shared with the CLC for input. She noted that a CLC member has volunteered to be the co-chair and asked if anyone had objections. None were noted and BWXT NEC thanked the CLC member for stepping into this role. The co-chair role will officially begin starting in 2021 and Natalie noted that more detail on the role will be included in the terms of reference. Natalie then explained that one CLC member, who had applied in the fall last year and accepted, hasn't responded to any electronic or paper mail communications. We have offered for this person to defer to 2021, however there has still been no response. Next, Natalie explained that BWXT is beginning its CLC recruitment for 2021 and will advertise through a multi-pronged approach to reach as many interested members of the community as possible, including its existing contact list. She asked if the CLC had any suggestions and the following were offered: one CLC member noted BWXT NEC should reach out to the MPP and MP to request that the CLC application details be added to their constituency newsletter/email. Another CLC member noted BWXT should recruit female engineers. BWXT made note of these suggestions and thanked the CLC for feedback. Afterwards, Natalie explained that BWXT would like to host a video tour for the CLC before the end of the year if possible and that the company would like to have a call in November to discuss any remaining items, conduct an evaluation of the CLC and gather feedback. The CLC agreed on this plan.

Natalie then asked the CLC for feedback on the company website and if the CLC is hearing anything in the community about BWXT NEC. Kathleen noted she would follow up with CLC members on the website review, including whether there should be any additions to the FAQ page on the website. The committee didn't have any new information to share and agreed that the second wave of COVID-19 has been a priority in the community. The CLC mentioned that they would be interested in more guest speakers to provide different perspectives on the nuclear industry.

Dave Snopek then provided the CLC with some regulatory updates. He first noted that the Commission extended the CNSC staff beryllium re-sampling results deadline to October 30, 2020, due to COVID-19. He explained that BWXT NEC's current licence expires December 31st, 2020 and the decision on BWXT NEC's application is pending the CNSC staff beryllium results. Dave explained that BWXT NEC's results from the independent laboratory were good and that almost all were less than the lab detection limit. He noted that the full report is online at www.nec.bwxt.com. Dave also highlighted that the CNSC Regulatory Oversight Report public meeting where BWXT NEC will participate will be held on either December 8, 9 or 10 and will be held via videoconference. This meeting is held to evaluate all licensees on the previous year's

performance. Kathleen noted she would send the CLC details on the meeting when they are available.

Next, Dave provided an update on data on the public information website. This request was from Lake Ontario Waterkeeper's intervention asking for quality raw data on the website. This commitment was made by BWXT NEC at the licence renewal hearing in March 2020. Dave noted that the company is working on this for next year for the new licence period.

Dave then provided some information on safety scenarios. He began by noting that BWXT NEC contemplates all accident scenarios, including low probability events. He stated that we analyze a wide variety of potential internal & external events (ex. severe weather, fire, airplane crash) and significant hazard sources (ex. natural uranium powder and pellets, hydrogen). The engineering and administrative controls implemented provide adequate protection to the public and environment and risks from the facility are low or very low and there are no credible accident scenarios that require evacuation of the public due to a release of radiation. Dave mentioned that Safety Analysis Report (SAR) summaries are on the public information website. Next, Dave outlined two specific events: catastrophic fire and hydrogen tank. The fire would be a worst case scenario, however there is not a credible fire accident that would exceed the threshold for sheltering in place or evacuation of the public due to release of uranium. Dave noted that there are some scenarios with the hydrogen tank where there is potential for broken windows and heat injury if there is fire, but there would be no building damage, no uranium release and no injury from a pressure wave. A CLC member asked what would happen if a train derailed beside the facility. Dave noted that BWXT NEC looked at the frequency of derailment and potential impacts to the building and the hydrogen tank. Another CLC member asked specifically which company analyzes these scenarios and mentioned by providing this information it could help the public better understand and accept the information. Dave noted that Arcadis completed these safety scenario analyses. Next, another CLC member asked what would happen if the train was carrying hydrocarbons. Dave explained that this was looked at in the analysis and the primary concern would be the hydrocarbons energy density versus what is in the hydrogen tank. He noted the hydrogen tank involvement wouldn't change the accident because the energy density of oil is higher than hydrogen. Jon also added in that there are unique attributes to hydrogen in that hydrogen rises and would dissipate in an upward fashion once released from the tank. A CLC member then asked if trains have speed reductions in the area. Dave answered yes and noted that BWXT NEC has had dialogue with CN Rail and the train slows down in the area and goes even slower if they are carrying dangerous goods. Dave committed to discussing this further with the CLC at the next meeting as this is a concern in the neighbourhood. The CLC agreed noting that there needs to be more information available to the community on the safety of the hydrogen tank.

Next, Kathleen Augustin provided updates on the Public Information Program (PIP) and asked for CLC feedback. First, Natalie provided the CLC with an update on recruitment for the dedicated staff member for Toronto. She noted there were many qualified applicants and that

interviews will begin soon. One of the actions for this dedicated staff member was to conduct door-to-door outreach and this is currently on hold due to COVID-19. Next, Kathleen informed the CLC that BWXT NEC is launching its own dedicated social media channels in October. The company is creating its own Facebook and Twitter channels to better connect with the communities in Toronto and Peterborough. Additionally, the company will be holding Facebook Live events in October in lieu of the annual community barbeque. The Toronto event is scheduled for Monday, October 26 from 6-8 p.m. and will have a presentation with Q&A sections throughout. She noted that guests can submit questions in advance to questions@bwxt.com or ask them via the chat during the event. Kathleen then advised the CLC that the Public Attitude Survey will begin soon and run from mid-October to mid-November. Details are included in the newsletter and will be posted on the public website, mailed to the community and posted on social media soon. Kathleen explained that the public attitude survey is conducted by Ipsos and that participants can go to the link provided to complete the web-survey. Additionally, Ipsos will conduct phone surveys to those who live nearby the facility and have a landline. Kathleen thanked CLC members for providing feedback to the survey and noted that the survey results will be shared with CLC members in 2021. Kathleen then informed the CLC that the summer newsletter was recently mailed and contained key information about uranium, licence renewal, social media, public attitude survey and Indigenous relations. She reminded the CLC that BWXT NEC is always open to feedback on the newsletters and would like the CLC to provide topics they feel would be of interest to the community. Kathleen also informed the CLC that the company is working on video tours for the public in Peterborough and Toronto. She explained that the Peterborough video will be completed first, as there is more space to film in that facility with physical distancing in mind.

Natalie then discussed news and media noting that there hasn't been any new information online or print in Toronto. She did explain that there have been over ten articles in Peterborough since April focused on emergency drills, beryllium sampling and community picketing. She noted that four of these were opinion pieces from community members. Natalie also informed the CLC that the Citizens Against Radioactive Neighbourhoods (CARN) group in Peterborough has begun picketing again. This occurred leading up to and during licence renewal hearing and it looks as though they are continuing this on a semi-regular schedule following the hearing.

Natalie asked if anyone had any final questions. The meeting terminated. Next meeting date to be scheduled in November.