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Submission from CNSC Staff Mémoire du personnel de la CCSN

Status Report on Nuclear Rapport d'étape sur les **Fuel Cycle Facilities**

installations du cycle de combustible nucléaire

COVID-19 Update

Mise à jour COVID-19

Commission Meeting Réunion de la Commission

Scheduled for: Prévue pour : June 17, 2020 Le 17 juin 2020

Submitted by: Soumise par:

CNSC Staff Le personnel de la CCSN

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Signed/signé le

June 12, 2020

Haidy Tadros

Director General

Directorate of Nuclear Cycle and Facilities Regulation

Special COVID-19 Update

Directorate of Nuclear (Cycle and Facilities Regulation
All Sectors	 CNSC staff have developed safety protocols for the protection of staff with regards to the gradual return of site inspections. The protocols were shared with the Policy Health and Safety Committee, a committee internal to the CNSC. The CNSC has been part of benchmarking and sharing of information with other International nuclear regulators related to COVID-19 responses (e.g. the International Nuclear Regulators Association). Licensees have:
Uranium Mines and Mills	 Reduced the number of workers on each site to the minimum required for safety. Implemented additional spacing requirements in buildings and work areas. Added protective shielding around desks, where needed (i.e. reception, security, etc). Reduced capacity on vehicles and conveyances, including aircraft, to allow for physical distancing of passengers. Implemented additional screening of staff before boarding a flight (inbound and outbound). Increased spacing in cafeterias and removed self-serve options. Increased cleaning in all areas, including break rooms, washrooms and residences. Reduced use of northern Saskatchewan staff to minimize impact on small communities. For Cigar Lake and McClean Lake, the two operational sites, the licensees slowly brought these sites to a safe shutdown state and the sites are now being maintained with a small complement of staff (about 10% of normal staffing levels). In addition, Orano will be advancing normal summer shutdown work at McClean Lake at this time, minimizing the need for or duration of any subsequent shutdowns. Two new uranium projects (Denison Wheeler River and Fission Patterson Lake South) have been deferred by the proponents, citing the impact of COVID-19 on regular activities.

	CNSC staff continue to review routine compliance reports
	submitted by the licensee, engage in remote meetings with these
	licensees and have conducted at least one remote inspection. CNSC
	staff are reviewing the inspection plan for this year to determine
	which inspections can be conducted remotely at this time and which
	will require an on-site presence, with CNSC protocols in place, and
	have to be deferred to the autumn of this year, or perhaps later this
	year.
Uranium Processing Facilities	 All uranium processing and fuel fabrication facilities have put in place Business Continuity Plans and non-essential employees are working from home. Screening protocols, physical distancing and enhanced hygiene measures are in place at all facilities by each licensee. On April 13, 2020, the Blind River Refinery (BRR) and the Port Hope Conversion Facility (PHCF)'s UF₆ plant were placed into a safe shutdown state for an estimated four week period. The BRR and PHCF's UF₆ plant safely resumed production the week of May 18, 2020.
	 The PHCF UO₂ facility and the Cameco Fuel Manufacturing (CFM) and BWXT Nuclear Energy Canada (BWXT) facilities have continued operations to supply fuel to Canada's NPPs. The uranium processing and fuel fabrication facilities have measures in place to ensure the required minimum staff complement, where applicable.
	• Licensees continue conducting essential maintenance at the uranium processing and fuel fabrication facilities while implementing COVID-19 protocols and safety measures such as physical distancing.
	CNSC staff continue to engage with licensees and perform compliance verification activities through desktop reviews and/or remote inspections as required, until it is safe to do onsite inspections. On-site inspection are forecasted to begin in August, with CNSC protocols in place.
	• All nuclear substance processing facilities have business continuity plans in place and are currently in operation.
	 Non-essential staff / office workers are working from home
Nuclear Substance Processing Facilities	where possible, and enhanced hygiene and physical distancing
	measures are in place at the facilities to minimize health risks to
	workers.
	• SRB Technologies (SRBT): Manufacturing operations of the
	gaseous tritium light sources continues with precautionary
	measures in place. Facility access is restricted to essential
	personnel only (employees and maintenance contract staff
	required to ensure facility safety).
	• Nordion: As a critical supplier for global healthcare (e.g. Co-60 therapy and sterilization), Nordion continues to operate with a

	 number of appropriate safety measures in place. Nordion is actively planning for future return-to-work scenarios of office personnel, following government guidance. Best Theratronics Ltd (BTL): Operations continue with precautionary measures in place. CNSC staff continue to engage with licensees and perform compliance verification activities through desktop reviews and/or remote inspections as required, until it is safe to do onsite inspections. On-site inspection are forecasted to begin in the fall, with CNSC protocols in place.
Research Reactors	 All Research reactor licensees have put in place Business Continuity Plans and are currently in operation, with all non- critical staff working from home. McMaster: Production of medical isotopes is an essential service and therefore the reactor will continue to operate as long as it is safe. Ecole Polytechnique de Montreal (EPM): The reactor is operating as usual and safely. Regular reactor maintenance is performed by the licensee as per normal procedure and schedule. Royal Military College (RMC): Slowpoke-2 Facility at RMC operates as usual with essential workers. Regular reactor maintenance is performed by the licensee as per normal schedule. The facility is monitored 24/7 by the Military Police at CFB Kingston and Commissionaires on site. Saskatchewan Research Council (SRC): Decommissioning activities almost complete. The licensees have not currently encountered any difficulties with maintaining the minimum staff complement. All licensees perform maintenance work on the reactors as per procedures while implementing COVID-19 restrictions. With the exception of EPM, all research reactor licensees submitted their annual compliance reports before the regulatory deadline of March 30, 2020 and are in compliance with their licences. The EPM annual compliance report is expected in June 2020. CNSC staff continue to engage with licensees and perform compliance verification activities through desktop reviews and/or remote inspections as required, until it is safe to do on- site inspections. On-site inspection are forecasted to begin in the fall, with CNSC protocols in place.
Waste Management Facilities (at NPP sites)	The licensees have taken measures to ensure continuity of operations during the COVID-19 Pandemic, such as ensuring that all non-essential personnel work from home, restricted access to the facility, splitting staff into two distinct crews working separate two weeks on, two weeks off shifts.

	 Low level waste (LLW) transfers from the Darlington Nuclear Generating Station (DNGS), Pickering Nuclear Generating Station (PNGS), and Bruce Nuclear Generating Station (BNGS) to Western Waste Management Facility (WWMF) continue. Transfer of fuel from DNGS to the Darlington Waste Management Facility (DWMF) was suspended March 16th but resumed April 20th at a rate of 1 Dry Storage Container (DSC) per week (as opposed to 2 normally). Transfer of fuel from PNGS to the Pickering Waste Management Facility (PWMF) was suspended March 16th but resumed June 2 2020 at a reduced rate of 1 DSC per week (as opposed to 2 normally). No transfer of fuel ongoing at Point Lepreau. On-site CNSC inspections are being deferred until fall 2020, with CNSC protocols in place. CNSC staff are monitoring compliance through the reviews of ACR (annual compliance reports) and reviews of events.
CNL Facilities and Sites	 By March 19, 2020, in response to the COVID-19 Pandemic, CNL declared a period of reduced operations at all of its sites. Personnel were instructed to work from home. All environmental remediation and decommissioning work was stopped. No radioactive waste transfers took place after the week of March 23-27. During the initial phase, on average, less than 10% of the over 3,500 persons who work on CNL sites were required to be physically on-site. All other CNL staff worked from home. Protocols for the maintenance of site security at CNL were not compromised. Following public health guidelines, new protocols for obtaining access to CNL sites have been developed and shared with CNSC staff. CNL has developed a five-phase pandemic recovery plan to manage the resumption of site work in the new normal¹. During the period of reduced operations, CNL limited work activities to critical work at all its sites. Critical work at the Chalk River Laboratories (CRL) site included preparations for target residue material transfer, fuel channel fitness-for-service work related to operating nuclear power plants and two major COVID-19 related initiatives: 3D printing of mask/shield for front-line healthcare workers, and development work on a new off-the-shelf ventilator design through an international collaboration together with scientists from TRIUMF and SNOLAB, under the leadership of Nobel Laureate Dr. Art McDonald. There have been no confirmed or presumed cases of COVID-19 at any CNL site. On May 13, 2020, CNL entered Phase 1 of its pandemic recovery plan. From onset of CNL's Pandemic

- response, CNL senior management has been proactive in its communication to CNL staff.
- CNL has considered supply chain implications in the event of an extended period of restrictions related to COVID-19. Based on their experience with the ongoing pandemic, they are confident that there will not be any impact on their critical operations.
- The CNSC site office at the CRL site was shut down on March 15, 2020, along with the other CNSC offices across Canada. Site inspectors were directed by CNSC management to work from home. Planned inspections were postponed and site walk downs (CRL only) were cancelled.
- CNSC staff continue to engage with CNL and perform compliance verification activities through desktop reviews of annual compliance reports and/or remote inspections as required, until it is safe to do on-site inspections. As site operations resume and access restrictions related to COVID-19 are relaxed, CNSC staff will begin a gradual resumption of site walk downs and inspections, with CNSC protocols in place, while ensuring that they respect the site-specific protocols instituted by CNL and keeping themselves and others protected.

¹ ref. e-Doc 6307194, a summary of the pandemic recovery plan that was prepared (in both official languages), posted to CNL web sites and shared with regional stakeholders on May 06, 2020.