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## Event Initial Report

## Rapport initial d'événement

### Kinectrics Inc.

Industrial accident resulting in a fatality on June 14, 2021

### Kinectrics Inc.

Accident industriel causant la mort d'un travailleur le 14 juin 2021

Commission Meeting

Réunion de la Commission

October 5, 2021

Le 5 octobre 2021

# EVENT INITIAL REPORT (EIR)

E-DOCS# 6607753

EIR: Workplace Fatality at Kinectrics Inc. Tiverton Site

**Prepared by:** DNCFR-NPFD

**Licensee:** Kinectrics Inc.

**Location:** Tiverton, ON

**Date Event was Discovered:** 2021-06-14

**Have Regulatory Reporting Requirements been met?**

Yes  No

**Proactive Disclosure:**

Licensee: Yes  No

CNSC: Yes  No

Overview

## Reporting Criteria:

29 (1) Every licensee who becomes aware of any of the following situations shall immediately make a preliminary report to the Commission of the location and circumstances of the situation and of any action that the licensee has taken or proposes to take with respect to it:

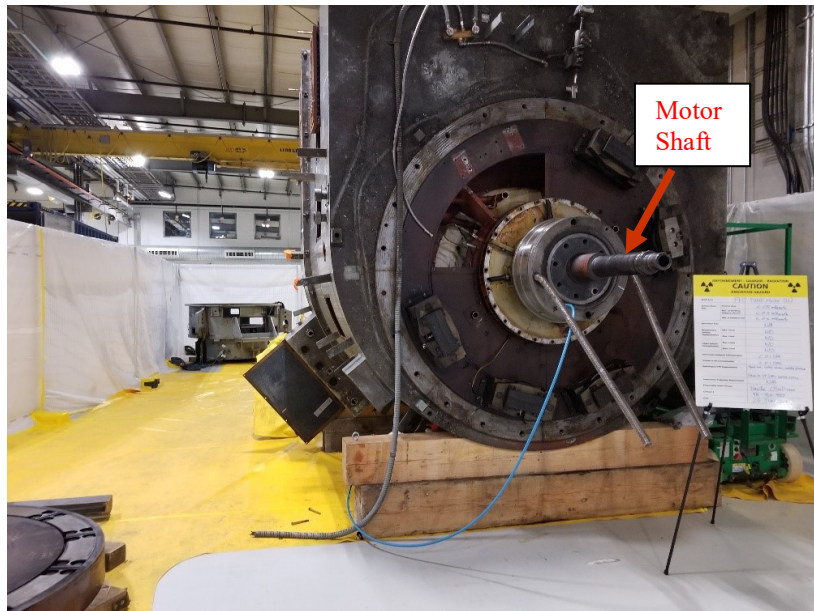
- (i) the death of any person at a nuclear facility

*\*Note:* Kinectrics Tiverton is not a nuclear facility as defined in the *Nuclear Safety and Control Act*. Activities at Kinectrics Tiverton are covered under WNSL-W2-3850.02/2028. However, this is considered to be a serious event that deems reporting to the Commission.

**Description:** The event occurred on June 14, 2021 at approximately 9:25 AM.

Kinectrics Inc. (Kinectrics) had been contracted by Bruce Power to disassemble and survey a Primary Heat Transport System motor (Figure 1) for unconditional release for disposal as non-radioactive waste. Kinectrics sub-contracted Western Mechanical Electrical Millwrights Ltd. (Western) to provide millwright services for the disassembly and handling of the motor and its components. At the time of the incident, Western was working on the flywheel of the motor (Figure 2). Kinectrics staff were present in the area. Kinectrics' preliminary investigation shows two Western millwrights (a foreman and an apprentice) were working on the flywheel and had applied hydraulic pressure to release the flywheel from the motor. The flywheel suddenly released and traversed the shaft, and a fatal injury was delivered to the apprentice.

**Figure 1: Primary Heat Transport System Motor**

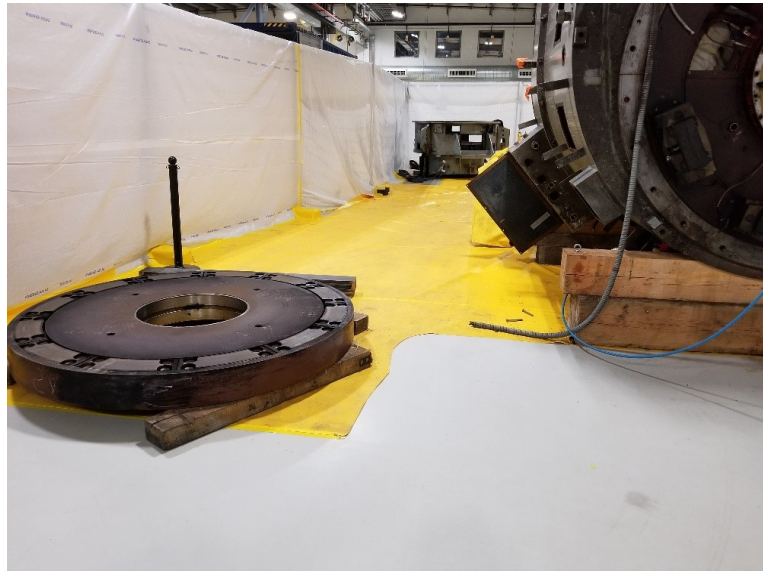


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**Figure 2: Fly wheel after removal from Motor**



Upon realizing the incident had occurred, all personnel immediately evacuated the facility. Personnel were contamination monitored outside at the assembly area. No contamination was detected. Emergency Response personnel were escorted to the scene to oversee their radiation safety. Upon exit from the area the Emergency Response personnel and their equipment/personal items were monitored, and no contamination was found.

The Ministry of Labour, Training and Skills Development (MLTSD) for the Province of Ontario was notified and commenced an investigation on June 14, 2021. As this is an industrial accident, MLTSD holds the primary responsibility for investigating occupational health and safety incidents in the province of Ontario.

**Cause(s):**

The immediate cause of the event was the movement of the flywheel from the motor due to the application of hydraulic pressure.

\*\*Much of the information provided above was derived from Kinectrics' Detailed Event Report, submitted to the CNSC in response to the event. As there is an ongoing investigation by MLTSD into the root cause of this event, this information reflects the observations, conclusions, opinions, etc. of Kinectrics. In no way, should it be construed that this information reflects the observations, conclusions, opinions, etc. of MLTSD.\*\*

**Impact of the Event**

**On People:**

How many workers have been (or may be) affected? Two (2)

How many members of the public have been (or may be) affected by the event? None (0)

**How were they affected?**

One fatality to a contractor from Western Mechanical Electrical Millwright Ltd.

One contractor from Western Mechanical Electrical Millwright Ltd. was treated for concussion and bruising.

**On the Environment:** None

**Other Implications:** None

**Licensee Actions**

**Taken or in Progress:**

On Monday June 14, 2021, Kinectrics took the following actions:

- Conducted confirmatory radiological surveys of the work area.

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- All work in the zoned areas of the facility was put on hold.
- Notified the MLTSD and the CNSC.
- Notified Bruce Power.
- A Kinectrics Executive Crisis Response Team was formed
- A company-wide announcement was made, and the company was stood-down. Grief counsellors were made available to all employees through the Homewood Health Employee and Family Assistance Program.
- An announcement was made on the publicly accessible Kinectrics website.
- A “Red Traffic Light” was initiated, requiring all Kinectrics supervisors to meet with their team members within two business days of posting (or within two days of return-to-work to account for vacations/sick days/holidays) to discuss how their team can strengthen defenses to prevent a similar occurrence.

On Tuesday June 15, 2021, Kinectrics commenced a review of the health and safety controls for all other contractors working at Kinectrics facilities. Kinectrics also commenced review of Hazard Identification and Risk Assessments for all work that has the potential for the “7-Deadly” hazards (electricity, energy sources, powered mobile equipment, working at heights, confined space, hoisting and rigging, radiation). Early in their investigation, MLTSD issued four orders; three of which were associated with clearing the work area such that the flywheel could be removed from the motor. The fourth order was to take out of service a crane (Figure 3).

**Figure 3 – Damaged crane (left)**



On Monday June 21, 2021, the work area was released back to Kinectrics by MLTSD. The Kinectrics internal investigation commenced.

On Monday July 5, 2021, Kinectrics submitted a full report in accordance with section 29 of the *General Nuclear Safety and Control Regulations*.

### **Planned:**

Any future actions resulting from the MLTSD investigation will be implemented as and when issued. Kinectrics will notify the CNSC of any such actions.

## CNSC Actions

### **Taken or in Progress**

The following actions were taken by the CNSC as a response to the event:

- Initial email notification to the Commission on June 14, 2021
- Held a virtual meeting with MLTSD on June 16, 2021 to discuss status of MLTSD investigation
- Bruce Site Office Senior Reactor Inspector conducted a follow up visit on June 28, 2021 at Kinectrics Tiverton site
- Held a virtual Meeting with Kinectrics on June 28, 2021 to discuss reporting requirements under *General Nuclear Safety Control Regulations*
- Reviewed Final Report submitted by Kinectrics on July 5, 2021
- Provided a status update to the Commission on July 20, 2021

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**Ongoing:**  
 CNSC staff will continue to maintain contact with MLTSD regarding the ongoing investigation.

**Additional reporting to the Commission Members anticipated:**  
 Yes  
 No

If Yes, provide method of reporting: Update will be provided through the Regulatory Oversight Report on the Use of Nuclear Substances in Canada: 2021.

Name and Title	Signature
<p><b>Kavita Murthy</b>                      Director General, Directorate of Nuclear Cycle and Facilities Regulation</p>	 <div style="font-size: small; text-align: left; margin-top: 5px;">                         Digitally signed by Murthy, Kavita                          DN: C=CA, O=GC, OU=CNSC-CCSN, CN="Murthy, Kavita"                          Reason: I am approving this document                          Location: your signing location here                          Date: 2021-09-16 08:58:31                          Foxit Reader PDF Version: 9.7.1                     </div>
	<hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <div style="display: flex; justify-content: space-between; width: 100%;"> <span>Name</span> <span>Date</span> </div>